## The United States Army's Current Capability to Conduct Combined Arms Maneuver

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AY 2011-2012

REPORT DOCUMENTATION PAGE  The public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for review maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimated to average 1 hour per response, including the time for review maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimated to average 1 hour per response, including the time for review maintaining the data needed, and completing and reviewing the collection of information.					Form Approved OMB No. 0704-0188
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1. REPORT DATE (DD-MM-YYYY) 11-05-2012	2. REPO				3. DATES COVERED (From - To) JUN 2011 - MAY 2012
4. TITLE AND SUBTITLE	<u></u>			5a. CON	TRACT NUMBER
The United States Army's Current Ca	pability to C	Conduct Combined Arms	Maneuver		
				5b. GRA	NT NUMBER
				5c. PRO	GRAM ELEMENT NUMBER
6. AUTHOR(S) LTC Gordon A. Richardson				5d. PRO	JECT NUMBER
				5e. TAS	KNUMBER
				5f. WOR	RK UNIT NUMBER
7. PERFORMING ORGANIZATION N U.S. Army Command and General St School of Advanced Military Studies Fort Leavenworth, KS 66027	aff College		Fellowship		8. PERFORMING ORGANIZATION REPORT NUMBER
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12. DISTRIBUTION/AVAILABILITY S	TATEMENT				
Approved for Public Release; Distrib	ution is Unl	imited			
13. SUPPLEMENTARY NOTES					
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15. SUBJECT TERMS			6 6:11		-
Unified Land Operations, Combined	Arms Mane	euver, U.S. Army's trainii	ng for CAM		
16. SECURITY CLASSIFICATION OF		17. LIMITATION OF		19a. NA	ME OF RESPONSIBLE PERSON
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# SCHOOL OF ADVANCED MILITARY STUDIES MONOGRAPH APPROVAL

LTC Gordon A. Richardson

Title of Monograph: The United States Army's Current Capability to Conduct Combined Arms Maneuver

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#### Abstract

THE UNITED STATES ARMY'S CURRENT CAPABILITY TO CONDUCT COMBINED ARMS MANUEVER by LTC Gordon A. Richardson, United States Army, 57 pages.

The United States Army is concluding its responsibilities in the Global War on Terrorism in Afghanistan and Iraq by conducting Counter Insurgency Operations now doctrinally associated with Wide Area Security (WAS). The point of this paper is to explore whether or not the Army is prepared for Combined Arms Maneuver (CAM) as an integral part of the U.S. Army's Unified Land Operations.

This paper examines two U.S. Army historical cases of when the Army transitioned from a predominantly, what is doctrinally known now as WAS, to a CAM. The focus of these historical cases is to analyze lessons learned from the CAM operation because of transitioning from one type of operation to another. These case studies enable a historical perspective on lessons learned and how the U.S. Army may determine relevance in the current environment. This is to ensure it does not make the same mistakes and maintains useful practices. This paper uses the lessons learned from World War I that had many negative lessons learned and the Persian Gulf War that had many positive lessons learned to help understand and analyze the Army's current situation.

The project also studies a near peer military competitor with the U.S. with which a political and economic conflict could result in a military CAM type operation. Lastly, the paper looks at these historical lessons learned; current U.S. Army capabilities and limitations; and provides some recommendations to improve the U.S. Army's ability to conduct CAM.

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#### Introduction

War is nothing but the continuation of policy with other means...In war, the subjugation of the enemy is the end, and the destruction of his fighting forces the means. <sup>1</sup>

Carl von Clausewitz, On War

The United States Army is concluding its responsibilities in the Global War on Terrorism in Afghanistan and Iraq by conducting Counter Insurgency Operations now doctrinally associated with Wide Area Security (WAS). This paper argues that the U.S. Army is currently not ready to deploy and execute Major Combat Operations now associated with Combined Arms Maneuver (CAM) successfully anywhere in the world due to training and organization deficiencies. This is a problem because the Army cannot afford to fail in its primary mission of winning its nation's wars. This paper addresses this problem statement by examining lessons learned from two historical case timeframes in order to learn from and apply them to the current environment. It concludes with an analysis of the U.S. Army's contemporary capabilities to conduct CAM.

The U.S. Army leadership is committed to being able to conduct Full Spectrum Operations, called Unified Land Operations (ULO) in current doctrine. This is executed through decisive action of offensive, defense, stability and direct support to civilian authorities by means of the Army's core competencies of CAM and WAS operations. Army Doctrinal Pamphlet 3-0, *Unified Land Operations*, states that "unified land operations describes how the Army seizes, retains, and exploits the initiative to gain and maintain a position of relative advantage in sustained land operations through simultaneous offensive, defensive, and stability operations in order to prevent or deter conflict, prevail in war, and

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<sup>&</sup>lt;sup>1</sup> Carl von Clausewitz, *On War*, Edited and translated by Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1976), 69 and 526.

create the conditions for favorable conflict resolution."<sup>2</sup> For much of the last decade, the Army has geared itself toward extended WAS, while CAM skills have atrophied.

It is important for this discussion to understand how Army doctrine defines its core competencies with CAM and WAS as well as how the Army organizes itself to train and execute these tasks. CAM and WAS are the application of the elements of combat power. CAM and WAS are tactical actions and tasks associated within offensive, defensive, and stability operations. WAS "is the application of the elements of combat power in unified action to protect populations, forces, infrastructure, and activities; to deny the enemy positions of advantage; and to consolidate gains in order to retain the initiative." Whereby CAM "is the application of the elements of combat power in unified action to defeat enemy ground forces; to seize, occupy, and defend land areas; and to achieve physical, temporal, and psychological advantages over the enemy to seize and exploit the initiative." The Army doctrine under ULO with offensive, defensive and stability operations will fight either CAM or WAS or a combination of both. In the active Army there are currently six heavy Divisions out of ten and its Brigades are primarily organized to conduct CAM. This is not to say they cannot execute WAS or that the four light Divisions cannot do CAM. However, the Army cannot produce heavy Divisions from light Divisions for the primary mission of CAM. This organizational structure forms the context of this paper.

The dilemma is that the Army has been conducting WAS in Afghanistan and Iraq for the last ten years, it is currently challenged in its ability to conduct CAM due to a lack of training and organization. Gian Gentile argues, "To be sure the American Army will be told to do lots of things…But first and foremost it must be an Army grounded in combined arms competencies. This must come first." The Army has not conducted a large scale CAM since the beginning of Operation Iraqi Freedom in 2003. One

<sup>&</sup>lt;sup>2</sup> Headquarters, United States Army, *Army Doctrine Publication 3-0, Operations* (Washington, DC: 10 October 2011), 1.

<sup>&</sup>lt;sup>3</sup> ADP 3-0, 6.

<sup>&</sup>lt;sup>4</sup> ADP 3-0, 6.

<sup>&</sup>lt;sup>5</sup> Gian P. Gentile, "The Death of the Armor Corps", (Article available at www.smallwars.com, Accessed on February 5, 2010).

of the doctrinal tenents of ULO for large land forces is lethality. It states, "The capacity for physical destruction is fundamental to all other military capabilities and the most basic building block for military operations." Many senior leaders have stated that the ability to be lethal or to conduct high intensity operations on a large scale has been diminished in the last decade. The Army is concerned about this issue. For example, the former Secretary of Defense Robert Gates noted that, "one of the Army's concerns...is getting back to training for 'high intensity' situations – a capability vitally important to deter aggression and shape the behavior of other nations. It strikes me that one of the principal challenges the Army faces is to regain its traditional edge at fighting conventional wars while retaining what it has learned – and relearned – about unconventional wars." The Army recognizes that it needs to be able to do WAS. Nevertheless, the Army cannot take the chance on a lack of preparedness in conducting a CAM operation as historically laid out in Charles E. Heller, and William A. Sofft's, America's First Battles 1776-1965. As seen in Iraq, that war started as a CAM. The Army cannot be focused on fighting the next war as if it is going to be exactly like the last war. History has shown that this is not always the case. Secretary Gates realizes that we have been fighting WAS and must maintain that skill but also must have the ability to conduct CAM as well. The massing of synchronized lethal effects is what the Army is struggling with and how to train in these atrophied competencies. The Army has not done this since the start of Operation Iraqi Freedom. GEN Dempsey mentions, "The need for heavy Armor and firepower to survive, close with, and destroy the enemy will always be there, as veterans of Sadr City and Fallujah can no doubt attest." He realizes that even if we get into another conflict, and it may be a WAS, that it could easily turn into or have elements of CAM.

<sup>&</sup>lt;sup>6</sup> ADP 3-0, 7.

<sup>&</sup>lt;sup>7</sup> Robert M. Gates, "A speech delivered by the Secretary of Defense to Association of the United States Army" (Washington, DC, October 10, 2007). Speech available at http://www.defense.gov/Speeches/Speech.aspx?SpeechID=1181 (Accessed on September 1, 2011).

<sup>&</sup>lt;sup>8</sup> Robert M. Gates, "A speech delivered by the Secretary of Defense to United States Military Academy" (West Point, NY: February 25, 2011). Speech available at http://www.defense.gov/speeches/ speech.aspx?speechid=1539 (Accessed on September 1, 2011).

Another problem is that the U.S. Army has been focusing all its resources on training and equipment in order to conduct the Global War on Terrorism for the last 10 years. The Army is withdrawing from Iraq and is in the process of finishing operations in Afghanistan. The Army is now concerned about the future, preparing for what will be the next war or conflict. As a result, there is a genuine concern throughout the Army leadership that our war-fighting skills have atrophied which could affect the Army in its ability to conduct CAM as part of ULO in a contemporary operating environment. ADP 3-0 states under decisive operations, "Army forces conduct regular and irregular warfare against both conventional and hybrid threats." The Army recognizes that it has to be prepared to do many types of operations. GEN Martin Dempsey stated that, "notably, it means that when we are committed to any mission along the spectrum of conflict, we must be prepared for all forms of contact. That is, we must be prepared for full spectrum operations or ULO. Importantly, it also requires us to dominate in what we describe as the competitive learning environment for it is in this dimension of conflict, in our ability to learn, where victory will be decided." The Army must learn, be trained and ready to do all aspects of full spectrum operations: offense, defense and stability operations.

This paper incorporates some aspects of the doctrine, organization, training, materiel, leadership and education, personnel and facilities (DOTMLPF) model only in order to organize the major points in each element for each section. Since it is not practical to cover the entire range of DOTMLPF in the scope of this project, elements of it are used to selectively analyze the case studies. Doctrine is the way units fight. Current Army doctrine emphasizes maneuver warfare combined with air-ground campaigns.

Organization is how units organize to fight; from Squads all the way up to Corps. Training is how units prepare to fight tactically from basic training to advanced individual training also including various types

<sup>&</sup>lt;sup>9</sup> ADP 3-0, 5.

<sup>&</sup>lt;sup>10</sup> Martin Dempsey, Commanding General of the U.S. Army Training and Doctrine Command, "Keynote speech for the Association of the United States Army Chapter Presidents Dinner" (Washington, DC: October 4, 2009). Speech available at http://www.army.mil/article/28312/gen-martin-dempsey-delivers-keynote-during-the-ausa-chapter-presidents-dinner/ (Accessed on August 1, 2011).

of unit training and exercises. Materiel is all the things necessary to equip the forces, such as, weapons and vehicles so they can operate effectively. Leadership and education is how the Army prepares its leaders to lead the fight, ranging from squad leader to general and their professional development. Personnel are the availability of qualified people for peacetime, wartime, and various contingency operations. Facilities are real property from installations to industrial facilities that support our forces. These definitions inside this model help to understand the flow of the paper.

This paper uses two U.S. Army historical cases of when the Army transitioned from a predominantly, what is doctrinally known now as, wide area security operation to a combined arms maneuver operation. The focus of these historical cases is to analyze lessons learned from the CAM operation because of transitioning from one type of operation to another. These cases enable us to look at lessons learned and how the U.S. Army may look at them in a current environment and ensure it does not make the same mistakes or that it maintains useful practices.

The first case study timeframe is from after the Philippine War through WWI, focusing on major developments that were accomplished before WWI and then lessons learned from WWI. Edward M. Coffman's *The Regulars: The American Army 1898-1941*, Russell F. Weigley's *History of the United States Army*, Mark Ethan Grotelueschen's *The AEF way of war: The American army and combat in World War I*, and Michael Matheny's *Carrying the War to the Enemy: American Operational Art to 1945* were helpful in understanding the details of the actions and issues of the U.S. Army in WWI. Allen R. Millett's "Cantigny" chapter explains many of the mistakes of the Army during the mobilization, training and execution of operations. <sup>11</sup> This book was a staple on the U.S. Army, Chief of Staff's reading list for lessons learned. Pete Schifferle's *Americas School for War: Fort Leavenworth, Officer Education, and* 

<sup>&</sup>lt;sup>11</sup> Russell F. Weigley. *History of the United States Army* (New York, NY: Macmillan Publishing, 1967); Charles E. Heller, and William A. Sofft. ed, *America's First Battles 1776-1965* (Lawrence, Kansas: University Press of Kansas, 1986); Edward M. Coffman, *The Regulars: The American Army 1898-1941* (Cambridge, Massachusetts and London, England: The Belknap Press of Harvard University Press, 2004); and Mark Ethan Grotelueschen, *The AEF Way of War: The American Army and Combat in World War I* (New York, New York: Cambridge University Press, 2007).

Victory in World War II gave an in depth perspective on the education system for staff planners because of WWI in preparation for WWII. Also incorporated was Dan Fullerton's "Learning from the Past:

Assessing World War I, Excerpted from Bright Prospects, Bleak Realities: the U.S. Army's Interwar Modernization Program for the coming of the Second World War" for historical analysis and insight. All these resources gave the foundation for the primary historical accounts and assisting in analyzing and understanding of the lessons learned. 12

The second timeframe is from after the Vietnam War through the Persian Gulf War focusing on major developments that were accomplished before the Persian Gulf War and lessons learned from the Persian Gulf War. The primary resources used for the Army's development after the Vietnam War and the development of the AirLand Doctrine were Conrad C. Crane's *Avoiding Vietnam: The U.S. Army's Response To Defeat In Southeast Asia* and John L. Romjue's *American Army Doctrine for the Post-Cold War.* <sup>13</sup> These resources laid the framework for understanding the starting point of the Army in preparation for the Cold War and Persian Gulf War. Other resources used for the period just before and lessons learned from the Persian Gulf War include Robert H. Scales' *Certain Victory: The US Army in the Gulf War*, which viewed the execution of the war as a result of the Army's peace time actions. Richard Swain's *Lucky War: Third Army in Desert Storm*, and Stephan A. Bourque's *Jayhawk!: The VII Corps in the Persian Gulf War*. These books also laid out the history by looking at several echelons and different perspectives from Corp to Army. <sup>14</sup>

<sup>&</sup>lt;sup>12</sup>Peter J. Schifferle, *Americas School for War: Fort Leavenworth, Officer Education, and Victory in World War II* (Lawrence, Kansas: University Press of Kansas, 2010); Michael R. Matheny, *Carrying the War to the Enemy: American Operational Art to 1945* (Norman, OK: University of Oklahoma Press, 2011).

<sup>&</sup>lt;sup>13</sup> John L. Romjue, *American Army Doctrine for the Post-Cold War* (Fort Monroe, VA: Military History Office, US TRADOC, 1996); and Conrad C. Crane, *Avoiding Vietnam: The U.S. Army's Response To Defeat In Southeast Asia* (Carlisle, PA: Strategic Studies Institute, U.S. Army War College, 2002).

<sup>&</sup>lt;sup>14</sup> Robert H. Scales, *Certain Victory: The US Army in the Gulf War* (Fort Leavenworth, KS: U.S. Army Command and General Staff College Press, 1994); Richard Swain, *Lucky War: Third Army in Desert Storm* (Ft. Leavenworth, KS: Command and General Staff College Press, 1995); Stephen A. Bourque, *Jayhawk!: The VII Corps in the Persian Gulf War* (Washington, DC: Government Printing Office, 2002).

This paper looked at China as a possible scenario that could involve hostilities with CAM against a near peer competitor. ADP 3-0 states, "Threats are not static or monolithic. Threats can arise from divergent interests or competition among states, groups, or organizations in an operational environment." <sup>15</sup> In addition, the enemy or threat could be a "nuclear-capable nation-state partnered with one or more non state actors through ideological, religious, political, or other ties. This enemy can employ advanced information technology, conventional military forces armed with modern equipment, and irregular forces at various levels of organization, training, and equipment." <sup>16</sup> China possesses these capabilities and is a good example to explore as a threat. As China becomes more powerful and influential economically and militarily, there may be a conflict of interest and therefore they could be a possible threat to the U.S. and its allies. There are many books on China. The following were the most helpful in understanding the military capabilities and economic and political policies of China. They were Anthony H. Cordesman and Martin Kleiber's Chinese Military Modernization and Michael Swaine, Andrew Yang, and Evan Medeiros with Oriana Mastro's Assessing the threat: the Chinese Military and Taiwan's Security for general information on policy and military data. The Information Office of the State Council of the People's Republic of China, China's National Defense in 2006 gave insight of how China sees itself and the world as well as what it wants the world to know which was one the first times they did this. The Office of the Secretary of Defense, Annual Report to Congress, Military and Security Developments Involving the People's Republic of China, 2010 assisted in how the U.S. military sees China and its military capabilities and interests. Using both books and government references gave a better insight on China through different perspectives.<sup>17</sup>

<sup>&</sup>lt;sup>15</sup> ADP 3-0, 4.

<sup>&</sup>lt;sup>16</sup> ADP 3-0, 4.

<sup>&</sup>lt;sup>17</sup>Information Office of the State Council of the People's Republic of China, *China's National Defense in 2006*. (Beijing:State Council of the People's Republic of China, 29 December 2006); Anthony H. Cordesman and Martin Kleiber, *Chinese Military Modernization* (Washington, D.C.: The Center for Strategic and International Studies Press, 2007); Michael Swaine, Andrew Yang, and Evan Medeiros with Oriana Mastro, eds., *Assessing the threat: the Chinese Military and Taiwan's Security* (Baltimore, Maryland: Hopkins Fulfillment Service, 2007); and Office

Then the paper examines the current U.S. Army's capabilities and weaknesses and where it is headed in the future. The following authors assisted in understanding the current Army and issues it is struggling with. Thomas Donnelly and Frederick W. Kagan's Ground Truth, The Future of US Land Power and Nathan Freier's "U.S. Ground Force Capabilities through 2020" gave information on where the Army is now and in the future. Gian P. Gentile's "The Death of the Armor Corps" and "COIN is Dead: U.S. Army Must Put Strategy Over Tactics" articles were insightful and his conclusion matched many of the lessons learned from history. This study also looked at the Mission Command Training Program (MCTP) research results.<sup>18</sup>

The final portion of the paper used the lessons learned from the historical cases to compare them to where the Army stands currently after engaging in WAS. By analyzing these outcomes in order to understand what is needed for the U.S. Army to be able to conduct the next possible CAM under ULO. Lastly it discusses some possible courses of actions to ensure that the Army is prepared to maintain its ability to conduct WAS, but more importantly, ready for CAM.

## U.S. Army lessons learned from World War I

The Army conducted what is now referred to as Wide Area Security during the Philippine War, then transitioned to preparing for combat operations now known as Combined Arms Maneuver in preparation for World War I. The lessons learned from this timeframe leading to WWI and the results of that on operations provide a suggestive analogy to present conditions. After the Philippine War, is the starting point to understand the Army's situation prior to WWI. It had been fighting a WAS fight for

of the Secretary of Defense, Annual Report to Congress, Military and Security Developments Involving the People's Republic of China, 2010 (Washington, DC: Department of Defense, 2010).

<sup>&</sup>lt;sup>18</sup> Thomas Donnelly and Frederick W. Kagan, *Ground Truth, The Future of US Land Power* (Washington, DC: The AEI Press, 2008); Nathan Freier, "U.S. Ground Force Capabilities through 2020" (Center for Strategic & International Studies, October 2011); Gian P. Gentile, "The Death of the Armor Corps," (article available at www.smallwars.com, 2010) and "COIN is Dead: U.S. Army Must Put Strategy Over Tactics," (article available at www.worldpoliticsreview.com/articles/print/10731, 22 November 2011).

many years in securing the west and then policing up after its colonial possessions. Dennis Vetock describes it as "The 1917 Army's collective combat experience consisted chiefly of small-scale irregular fighting against American Indians, Philippine insurrectos, and Mexican bandits – and even that experience could be claimed by only a few of the older Regulars." The Army's focus had been WAS both at home and abroad and this is what the experience of the force had been prior to a CAM operation during WWI. When the U.S. declared war on Germany on 6 April 1917, starting U.S.'s participation in WWI, the Army after the Philippine War and the Mexican border disputes had only limited CAM experience. The limited officers that had this experience in the Army was then unprepared for integrating CAM for large-scale operations. The nation and the fast growing Army had many difficulties in their ability to mobilize, organize, train, equip and deploy as an expeditionary force to France in order to support the French and British against a formidable German enemy.

In the evolution of U.S. Army doctrine and understanding of current military tactics, American officers did travel to Russia and Japan and observed the Russo-Japanese War in 1904 to 1905, which Japan defeated the Russians over control of Korea. This was a different type of war than the American officers were used to but gave them the opportunity to observe a European and Asian power. There were many casualties on both sides of this conflict. Observers realized that eventually a tactical stalemate between two powers under modern warfare was likely. The way the Europeans were going to overcome this stalemate was by ensuring a quick offensive operation that resulted in a quick defeat of the enemy. Mobility was the key to success. This influenced many American officers.

The U.S. Army under GEN Pershing developed an open warfare doctrine. This doctrine, as Russell Weigley states it, "must take the offensive and drive the Germans out of their trenches, and that therefore American soldiers must go beyond the British and French preoccupation with trench warfare to

<sup>&</sup>lt;sup>19</sup> Dennis J. Vetock, *Lessons Learned: A History of the US Army Lesson Learning* (Carlisle Barracks, PA: US Army Military History Institute, 1988), 39.

learn offensive tactics suitable to open and mobile war." This was similar to CAM and GEN Pershing had an understanding of it in order to mass all enablers at the penetration point and then maneuver through. The Army at the time did not understand nor had the training to execute. Therefore, there was some confusion about what open warfare meant since the only experience the majority of the Army had was small mounted tactics against the lightly armed Indians on the open plains. After years of WAS, this was the only experience and training the Army and its leaders had. Also, the officer corps rapidly grew at this time and there was only a handful of experienced officers in the Divisions and Corps. Doctrine was primarily composed of small unit tactics and drill even after observing the Russo-Japanese War, which started to show the importance of machineguns and artillery. As a result, there was not much doctrine for large formations and the only reference point was that of the large Civil War formations. The War Department report of 1919 states "the remarkable development in aeroplanes, tanks, motor transport, railroad artillery, caterpillars, trench mortars, machine guns, gas warfare, radio and sound and flash ranging apparatus, and photography have modified in many respects the details and conditions of warfare." The Army had to adapt to the changes in technology and reflect that in doctrine.

The organization of the Army was changing as well. It started with Secretary of the War Elihu Root in 1899, who realized the Army had to change from being a frontier constabulary Army. Secretary Root, as described by Edward Coffman, had "two fundamental principles...to provide for war and the regular establishment." Under Secretary Root's supervision and influence with the President and Congress, in 1901, the Army announced a reorganization of Army Schools. In this reorganization, each post would have an officer school as well as some advanced schools. By 1910, this advanced even further so that the Army Service Schools each had a specialty. In 1903, Congress passed legislation establishing a General Staff and the War College to assist in organization of the army and developing national war

<sup>&</sup>lt;sup>20</sup> Russell F. Weigley, *History of the United States Army* (New York, NY: Macmillan Publishing, 1967), 374.

<sup>&</sup>lt;sup>21</sup> War Department, *Annual Reports*, *1919*, Volume I (Washington, DC: Government Printing Office, 1920), 473. <sup>22</sup> Edward M. Coffman, *The Regulars: The American Army 1898-1941* (Cambridge, Massachusetts and London, England: The Belknap Press of Harvard University Press, 2004), 142.

plans. This took time to set up for instructors and students to graduate. Weigley states, "But the limitation on numbers badly strained the ability of the General Staff to plan for war." This started to improve the planning capability of the Army but still small numbers of officers completed this training. In addition, in 1903, the Militia Act, or Dick Act, helped to improve the reserve program. In 1911 the Maneuver Division was formed in San Antonio but took ninety days to form and was understrength with only 13, 000 troops. All these changes were needed in order to move towards modernization.

The U.S. Regular Army was a small force and relied on the militia in times of war. Secretary Root started initiatives to organize and increase the capabilities of the National Guard to augment the Regular Army. In 1903, Congress passed the Dick Act. This revised the obsolete Militia Act of 1792. It separated the militia into two classes, the Organized Militia or National Guard, and the Reserve Militia. Both of these were organized like the Regular Army. This was a step in the right direction but there were still problems with execution. The new measure failed for it still restricted the federal government to call up guard units. Weigley mentions that later during the execution of WWI, Secretary of War Baker paid tribute to "Root's reforms as indispensable to the prosecution of that war, but at least to the eve of the war the Root reforms remained more a promise that a fruition." The Army understood that its organization as derived by Congress legislations was hindering its ability to standardize, execute and control large forces

The Army started to conduct large annual maneuvers and the lessons learned from these all stated the need for large, self-sufficient combined arms teams. The Field Service Regulations in 1905 established the organization of Divisions in wartime. Then in the General Staff in 1910 drew up a plan for three permanent infantry Divisions with a mix of Regular Army and National Guard regiments. This plan was a good start in creating a standing Army but was not executed due to the need for forces to handle a dispute on the Mexican border in 1911. Instead, the Army organized a provisional maneuver Division

<sup>&</sup>lt;sup>23</sup> Weigley, *History of the United States Army*, 350.

<sup>&</sup>lt;sup>24</sup> Weigley, *History of the United States Army*, 322.

from many different types of regular and National Guard units that were available. This was because mobilization of the National Guard Regiments from specific states was still a major problem that took too much time. The Army did not have the logistical and administrational organization to execute a mobilization nor could it call and mobilize the reserves quickly nor did it have a large regular force. This was apparent in 1916 during Mexico's revolution and civil war that the U.S. Army had to assist in solving. With the attacks into the U.S. by Villa, the Army had problems getting enough regulars to conduct successful operations. The War Department called up three state National Guard units but this was not enough. As a result, Congress passed in 1916 the National Defense Act that would increase "peace strength of the Regular Army to 175,000 over a period of five years." The U.S. was realizing that it needed a standing Regular Army in order to react quickly to any problem.

The Army was not trained to conduct synchronized combined arms operations needed to be successful in a CAM operation. The Army, with its large numbers of infantry units, could not synchronize its artillery in massive amounts to create the needed effects for the execution of the open warfare concept. In addition, the infantry was challenged in utilizing and fighting with the new armor force. After the war, the War Department Report of 1919 states, "the war has taught the necessity of the appreciation by all officers of the interdependence of all arms of the service in battle. They are to fight together: they must be trained and taught together if the common knowledge of the powers and limitations of each arm, and the mutual confidence, without which efficient teamwork in battle is impossible." Divisional training was also addressed. For example, as mentioned by Allen Millett, the "1st Division Commanders studied the training and found it flawed. The infantry had not had enough marksmanship training...artillery-infantry coordination left much room for improvement." The Army needed to improve its training.

<sup>&</sup>lt;sup>25</sup> Weigley, *History of the United States Army*, 348.

<sup>&</sup>lt;sup>26</sup> War Department, *Annual Reports, 1919*, Volume I, 374.

<sup>&</sup>lt;sup>27</sup>Allen R. Millett, "Cantigny," *America's First Battles 1776-1965*, eds. Charles E. Heller and William A. Stofft (Lawrence, Kansas: University Press of Kansas, 1986), 165.

This type of training deficiencies was prevalent throughout the Army. As a result, at Cantigny, the first American battle in WWI, Millett mentions "the demands of command and logistics so exposed the Americans that their casualties doubled those of the French Division they had replaced."<sup>28</sup> The 28<sup>th</sup> Infantry Regiment conducted the attack on Cantigny. The result for that unit was that they took many casualties including many officers and one of its Battalion Commanders. Millett mentions that the Regimental Commander "estimated that one-third of his front line troops had become casualties...also that some of his men had abandoned the front line trenches."<sup>29</sup> Millett goes on to state that the artillery was not synchronized with maneuver and the "firing batteries did not displace forward rapidly enough; infantry and artillery officers did not correctly identify friendly infantry positions at the front: observed and adjusted fire was virtually nonexistent; and preplanned and scheduled concentrations did not usually fit the fluid situations of open warfare." This lack of cooperation was typically for most units during the war. The 28<sup>th</sup> Infantry Regiment did captured Cantigny but with a high number of casualties. The resulting casualties were 38 officers and 903 soldiers. During the U.S. counteroffensive with 1st and 2nd Divisions at Soissons from 18-21 July, the Divisions did have success against the Germans, but there were 12,000 casualties. The U.S. Army suffered 320,710 casualties out of 4,743,826 men mobilized. These numbers were considered very high.

The Army knew that these casualty rates were disproportionately high, unacceptable and could be rectified with changes in organization and training. After the war, the War Department report of 1919 states, that "a reasonable efficiency in peace time training for war can never be secured until the present system of small, isolated Battalion and Company posts, which is a relic of the days of Indian fighting is

Millett, "Cantigny," America's First Battles 1776-1965, eds. Charles E. Heller and William A. Stofft, 167.
 Millett, "Cantingy," America's First Battles 1776-1965, eds. Charles E. Heller and William A. Stofft, 167.

<sup>&</sup>lt;sup>30</sup> Millett, "Cantigny," *America's First Battles 1776-1965*, eds. Charles E. Heller and William A. Stofft, 181.

replaced by a system which enables entire Divisions to be trained together."<sup>31</sup> The Army knew it had been focused on WAS and not large scale CAMs.

The U.S. government did not put the required resources in material or equipment for a large Army during the interwar period and thus was unprepared to support a rapidly growing Army with what it needed to fight in WWI. In the years prior to WWI between 1898 and 1916, Stewart describes, "Congress appropriated only an average of \$150,000 annually for procurement of machine guns, barely enough to provide four weapons for each regular regiment and a few for the National Guard." Because of the previous types of threats and conflict, there was no need for a large budget for the Army. The Army was typically fighting inferior guerrilla forces in a WAS. As a result, Stewart also mentions the "development of American artillery and artillery ammunition also lagged behind that of European armies. The Army did adopt in 1902 a new basic field weapon, the three-inch gun with an advanced recoil mechanism." Even so, this was not a large gun suited for the synchronized effects needed for the CAM battlefields of WWI.

The U.S. was thriving and growing during the industrial age. The U.S. had the largest automotive industry in the world but military production was at such low volume that it affected the U.S. Army. The U.S. Government had, as Weigley states, "Neglected the subject of economic mobilization which caused difficulties." This caused the Army not have the basic materials and equipment it needed to fight and ended up using British and French supplies and equipment once it was in France. Also, that "no American tank ever reached the front." The Army had to change from using all horses to supplementing military equipment with vehicles. Michael Pearlmen describes, "The U.S. Army also lacked heavy weapons and the specialists to use them. Artillery, tanks, and airplanes were necessary to counter machine-gun fire but

<sup>&</sup>lt;sup>31</sup> War Department, Annual Reports, 1919, Volume I, 474.

<sup>&</sup>lt;sup>32</sup> Stewart, *American Military History*, Volume I, *The United States Army and the Forging of a Nation*, 1775-1917, Second Edition, 371.

<sup>&</sup>lt;sup>33</sup> Stewart, *American Military History*, Volume I, *The United States Army and the Forging of a Nation*, 1775-1917, Second Edition, 374.

<sup>&</sup>lt;sup>34</sup> Weigley, History of the United States Army, 360.

<sup>&</sup>lt;sup>35</sup> Weigley, History of the United States Army, 362.

none of these products had been priorities for the prewar army."<sup>36</sup> This is because the center piece of the Army for WAS was predominately executed with infantry and horse cavalry. During the war, the War Industries Board was created to coordinate economic mobilization of the Army with civilian agencies but it did not start to have an impact until the end of the war.

The Secretary of War Newton Baker trusted the leadership of his military leaders and "believed that his primary duty was to build an army with which Pershing could fight, then leave Pershing to fight it." The U.S. Army officers and NCOs were not well respected by the more knowledgeable and experienced officers of France and the United Kingdom. Weigley states the "British and French generals expressed concern about the ability of American officers to command Divisions, Corps and Armies." This was a valid concern considering the U.S. Army leadership had minimal training and experience leading large formations. Nevertheless, this notion slowly changed as the war progressed and the U.S. Army grew in size to two Armies that had learned and gained experience. Under the leadership of GEN John Pershing the U.S. soldier earned the respect of the allies. The U.S. soldier was brave during chaos and had the ability to learn quickly and adapt to change.

The number of personnel in the Army was limited and with the start of the war in 1917, the War Department General Staff had "estimated that the U.S. could not fight on the Western Front ...would require no less than 1 million men and might reach 4 million. To raise, organize arm and equip, train and deploy such a force might take two years." Prior to the war, the Regular Army from 1902 to 1911 had an average of 75,000 officers and men. This was below the 100,000 that Congress had authorized in 1902 in order to fill 30 Infantry and 15 Cavalry Regiments supported by a Corps of Artillery. Then in 1916, the National Defense Act "increased the authorized peace strength of the regular army to 175,000 over five

<sup>&</sup>lt;sup>36</sup> Michael D. Pearlmen, *Warmaking and the American Democracy* (Lawrence, Kansas: University Press of Kansas, 1999), 195.

<sup>&</sup>lt;sup>37</sup> Weigley, *History of the United States Army*, 378.

<sup>&</sup>lt;sup>38</sup> Millett, "Cantigny," *America's First Battles 1776-1965*, eds. Charles E. Heller and William A. Stofft, 160.

<sup>&</sup>lt;sup>39</sup> Millett, "Cantigny," America's First Battles 1776-1965, eds. Charles E. Heller and William A. Stofft, 156.

years"<sup>40</sup> with a wartime strength of 300,000. The National Guard was to be increased to strength of over 400,000. Millett states, "When it went to war with Germany, the United States had only 5,971 officers and 121,797 enlisted men in the Regular Army." <sup>41</sup> Pearlmen goes on to say that mobilization numbers were low in the Army "in the first three months, there were barely 300,000 volunteers, far short of the 'at least three million men', needed according to the War Department assessment." <sup>42</sup> Finally, with the declaration of war on 6 April 1917, the U.S. Congress passed the Selective Service Act. This took time to implement before the first draftees started to report.

The U.S. Army lacked the proper facilities and equipment to train and billet soldiers. This is not surprising since the Army was mobilizing and growing at a rapid pace. Pearlmen describes, the "training camps lacked rifles, medical supplies, winter uniforms, sanitary facilities, and fully built barracks." All this had to be built, constructed or established. The logistical supply system was not set up to sustain the large number of soldiers training nor was there a system in place to have a massive influx during a war mobilization. The Army was learning as it went.

There are many lessons learned captured by the U.S. Army from the war that are relevant for the current U.S. Army to understand and relate to today's environment in order to prepare for a CAM type of operation. The amount of time it took to mobilize, organize and train the large number of soldiers and formations in time to affect the war almost resulted in defeat of an exhausted Allied force. After the war, GEN Pershing called for a number of review boards to look at infantry, artillery and armor training, their use and integration. The lack of training and materials resulted in a large number of casualties. Though the Army had their own equipment, they used mostly French artillery, airplanes and tanks. The French equipment was better quality and it took too long to get replacement equipment from the U.S. because of the large distance and minimal logistical transportation assets. The board stated that combined arms of

<sup>&</sup>lt;sup>40</sup> Weigley, *History of the United States Army*, 348.

<sup>&</sup>lt;sup>41</sup> Millett, "Cantigny," *America's First Battles 1776-1965*, eds. Charles E. Heller and William A. Stofft, 150.

<sup>&</sup>lt;sup>42</sup> Pearlmen, Warmaking and the American Democracy, 191.

<sup>&</sup>lt;sup>43</sup> Pearlmen, Warmaking and the American Democracy, 191

infantry, armor and artillery are the keys to success on the battlefield. Dan Fullerton states "The AEF literally learned on the job and paid the price for their ignorance and inexperience with the causalities disproportionate to the objectives achieved." The Army had success on the battlefield and helped contribute to the winning of the war for the allies but it cost many American lives. Their lack of training in large formations with all combat arms resulted in large number of casualties.

These lessons learned can be used now. The U.S. Army has to be prepared for a CAM operation. The next war may not necessarily be what was fought before. The U.S. has to invest its resources in keeping up its Army. The Army must continue to establish a solid doctrine that that stays up with technology and takes into an account the current enemy for engagement for a wide range of warfare from WAS to CAM. Then organize and continue to modernize both regular and reserve forces in order to establish the capabilities needed to execute doctrine that ensures success. In addition, it needs to be expeditionary and its ability to deploy light forces rapidly followed by intermediate and heavy forces. Finally, establish the training system for officers, NCOs and soldiers to achieve proficiency in the core tasks of both CAM and WAS. Otherwise, as seen in WWI the U.S. Army will take a large number of casualties that today would be highly unacceptable to the American public.

## U.S. Army lessons learned from the Persian Gulf War

The Vietnam War did have CAM against the North Vietnamese Army but had a significant counter insurgency or WAS against the Viet Cong. This took priority over European theater but after the Vietnam War, the U.S. Army quickly refocused its efforts back to the European theater and the defense of its European allies from a possible Soviet Union attack. There were many lessons learned that influenced the outcome of the Persian Gulf War that can be used to assist in the future preparedness of the U.S.

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<sup>&</sup>lt;sup>44</sup> Dan C. Fullerton, "Learning from the Past: Assessing World War I, Excerpted from Bright Prospects, Bleak Realities: the U.S. Army's Interwar Modernization Program for the coming of the Second World War" (Ph.D. Dissertation, University of Kansas, 2006), 5.

Army. Conrad Crane states, "The Army that won the Persian Gulf deserves credit for avoiding the common mistake of preparing to fight the last war." The Army realized that even though it was training for CAM in the European theater that the Vietnam War had the Army focused on WAS. Therefore, it had to refocus the whole Army back to CAM. As a result, the Army was prepared for the Persian Gulf War.

The mission and doctrine of the U.S. Army changed after the Vietnam War and quickly refocused on the Cold War and a possible war in Europe. The Army was ready to forget and move on from its experience in the Vietnam War. The Army did retain its mix of heavy and light Divisions but prepared its Divisions to conduct a CAM with the Soviets. Stewart discusses this refocusing in that, "The new volunteer Total Army needed more than mere numbers. It needed a mission; it needed to focus on what type of war it might need to fight. As a result, the Army began developing a new doctrine to regain its perspective and focus on its new missions after Vietnam." This mission started from the Commander in Chief. President Richard Nixon started to change the mindset of the U.S. Army even while Vietnam was winding down in 1969 with the Guam Doctrine. This doctrine called on the Army to be able to execute one and ½ wars. This done by having a smaller U.S. Army. This meant the Army would have to be prepared to fight a major conflict while still having the capability to engage in a small counter insurgency or peacekeeping task.

The Arab-Israeli or the Yon Kippur War of 1973 involved the Egyptians and Syrians against the Israelis. This was a CAM operation and was short and brutal. It got the attention of many senior American officers and continued to focus the U.S. Army away from WAS to CAM. GEN William DePuy, Commander of TRADOC at the time was one and he, as Stephen Bourque states, "noted that the Israeli tank crews, often using the same equipment their opponents used, were between three and six times more

<sup>&</sup>lt;sup>45</sup> Conrad C. Crane, *Avoiding Vietnam: The U.S. Army's Response To Defeat In Southeast Asia* (Carlisle, PA: Strategic Studies Institute, U.S. Army War College, 2002) 18.

<sup>&</sup>lt;sup>46</sup> Richard W. Stewart, ed. *American Military History*, Volume II, *The United States Army in a Global Era*, 1917-2008, Second Edition (Washington, DC: United States Center for Military History, United States Army, 2010), 381.

effective."<sup>47</sup> This was due to their training on live fire ranges. The Army continued to focus on the Warsaw Pact threat with its NATO allies. It had to defeat a technically sophisticated and numerically superior force. The Active Defense concept was created. It, according to Robert Scales, "emphasized economy of force and the need to strike a penetrating enemy force with surprise and with carefully husbanded combat power at the critical place and time."<sup>48</sup> Active Defense was reflected in FM 100–3, which was developed in 1982 and revised in 1986. This as stated by Crane, "reflected a key lesson…that without and operational link strategic failure could still result from tactical success."<sup>49</sup> This was a lesson that was learned from Vietnam. The manual also incorporated AirLand Battle doctrine, a more generalized doctrine stressing aggressive operations in depth with an increased emphasis on the exploitation of tactical air power. Armor and infantry forces with massive amounts of artillery supported with air attacking deep were the concept to defeat the many echelons of the Soviet Union's forces. This lead to U.S. forces in Germany to go from an occupying force to a preposition and a defense force staged against the Soviet Union. This alleviated some of the mobilization time constraints for getting forces to Europe.

After the Vietnam War, the Army underwent a number of organizational changes at the higher headquarters and tactical levels. At the highest level, the Army determined to reorganize its command structure for the Continental United States (CONUS) and separate its operational forces command and control headquarters from its training base. The steadfast reorganization accelerated the process of creating two major functional commands out of one multifunctional command. In 1973, the Army established TRADOC and FORSCOM. FORSCOM assumed oversight of all U.S. operational forces and TRADOC was responsible for training the force through schools and training centers. The Division

<sup>&</sup>lt;sup>47</sup> Stephen A. Bourque, *Jayhawk!*: The VII Corps in the Persian Gulf War (Washington, DC: Government Printing Office, 2002), 456.

<sup>&</sup>lt;sup>48</sup> Robert H. Scales, *Certain Victory: The US Army in the Gulf War* (Fort Leavenworth, Kansas: U.S. Army Command and General Staff College Press, 1994), 13.

<sup>&</sup>lt;sup>49</sup> Crane, Avoiding Vietnam: The U.S. Army's Response To Defeat In Southeast Asia, 8.

restructuring study group, which Stewart states, "concluded that the Division should retain three brigades, each brigade having a mix of Armored and mechanized infantry Battalions and supported by the same artillery and combat service units." This structure was the foundation for success and what the U.S. Army had for the Persian Gulf War. The Army still needed a light capability for rapid deployment. In August 1983, under the Army of Excellence program, Chief of Staff GEN John Wickham, directed TRADOC to restudy the entire question of organization. Stewart states that this resulted with "the need for smaller, easily transportable light Infantry Divisions for the express purpose of fighting limited wars. At the same time, the plan kept the heavy Divisions." The Army continued to improve on its forces with capabilities to deal with many types of operations such as CAM and WAS.

Another step in changing the Army and the other services in order to synchronize Joint operations was the passing of the Goldwater-Nichols Department of Defense Reorganization Act in 1986. This was done after a group of retired military leaders and experts met and recommended reforms needed for the military. This took three years. As a result, Congress passed the Goldwater-Nichols Act, which restructured the Defense Department. It addressed some immediate changes and did not overhaul completely the military system. The act strengthened the office of the Secretary of Defense (SECDEF) over the other service chiefs. In addition, it gave the Chairman of the Joint Chiefs of Staff and the Combatant Commanders a larger role in joint operational planning and more of a direct access to the SECDEF, National Security Council and President. The Goldwater-Nichols Act overhauled the headquarters of the three military services, as Stewart describes, "transferring oversight of such areas as financial management; information management; and research, development, and acquisition from the Army Staff to the Army Secretariat...its primary goal of forcing the services to become more tightly integrated within the Defense Department and more focused on joint warfare." With these changes the

Stewart, *American Military History*, Volume II, *The United States Army in a Global Era, 1917-2008*, 2<sup>nd</sup> ed., 392.
 Stewart, *American Military History*, Volume II, *The United States Army in a Global Era, 1917-2008*, 2<sup>nd</sup> ed., 393.

<sup>52</sup> Stewart, American Military History, Volume II, The United States Army in a Global Era, 1917-2008, 2<sup>nd</sup> ed., 406.

new force structure of five Army Corps with a total of 28 Divisions in both active and reserve in 1990 was the result of many years after Vietnam that tried to balance requirements of doctrine for CAM and WAS. This structure was instrumental in the success of the Army during the Persian Gulf War with support from the Air Force and Navy coordinated by a Joint Combatant Commander.

The Army initially had some problems with training. Throughout the seventies, there were funding shortages that undermined the readiness and morale of the soldiers in Germany, U.S. Army, Europe (USAREUR), mentioned by Stewart "suffered from under investment and under maintenance. Bad housing, dilapidated facilities, worn equipment, and inadequate training were the rule. The situation changed... increases in USAREUR's capital budget made up for years of parsimony, while stepped-up training improved U.S. combat capabilities."53 As a result, after 1980 and into the 1990s assignment to the U.S. Army in Germany was considered one of the premier assignments. This was because of the location in Germany with improved office and living facilities, increased training opportunities and areas that resulted in well-trained and motivated units as was reflected in VII Corps actions during the Persian Gulf War.

TRADOC realized that it needed to avoid the U.S. Army's historical high human cost of first battles that could be alleviated by traditional training only. The Army needed to, as Scales notes, "steepen the seasoning curve without paying in blood...how to practice fighting for real."54 As a result, the Army established the training centers. In the United States, the dirt training centers were the National Training Center (NTC) at Fort Irwin, California. This is where brigade-size units trained in maneuver and fires in realistic laser battles. This was against a well-trained opposing force that was similar to a Warsaw Pact force in a very large maneuver area. This training exercise also utilized observer/trainers that conducted after action reviews after each battle. The U.S. Army Brigades and Battalions in Europe conducted similar exercises at the Combat Maneuver Training Center (CMTC) at Hohenfels, Germany. CMTC was smaller

<sup>&</sup>lt;sup>53</sup> Stewart, *American Military History*, Volume II, *The United States Army in a Global Era, 1917-2008*, 2<sup>nd</sup> ed., 374. Scales, *Certain Victory: The US Army in the Gulf War*, 20.

in area but could accommodate Battalion and limited Brigade size exercises. Lastly, light Infantry
Brigades went to the Joint Readiness Training Center (JRTC) at Fort Chaffee, Arkansas, which later
moved to Fort Polk, Louisiana. In order to train Divisions and Corps, the Army established the Battle
Command Training Program at Ft Leavenworth, Kansas. This utilized battle simulations on computers for
lower echelons to stimulate the headquarter elements with information in order for the Commander and
staff to train on mission command. These were and still are state of the art training centers that
realistically prepared Army forces for combat. This resulted in a low casualty rate for the Persian Gulf
War. This was the direct result of superior training over the Iraqis.

The Army also conducted exercises in order to train on its ability to reinforce units in Europe, generally known as Return of Forces to Germany (REFORGER). Also, units went to the Middle East for training to conduct Operation Bright Star exercises. These were conducted in cooperation with the army of the Republic of Egypt. Another Army exercise was held in South Korea called Operation Team Spirit. The Divisions also conducted periodic readiness evaluations that tested the Division's ability to deploy quickly, especially units like the 82nd Airborne Division, 101st Airborne Division and 10th Mountain Division. These light Divisions were the Army's quick-reaction force, and were designed for short-notice contingency operations.

The Persian Gulf War was a test of the organization and training model that had been developed and executed. The result was that the U.S. Army planned, prepared and executed operational and tactical operations well. Stephen Biddle explains this in the following:

At 73 Easting, for example, the 2nd Armored Cavalry Regiment maintained a tight, efficient combat formation throughout an extended approach march, and did so in the midst of a sandstorm, in hostile territory, over unfamiliar terrain, and without significant losses to mechanical breakdown or logistical failure en route. Its crews' gunnery was exceptional, outperforming peacetime proving ground standards for both the M1 and the Bradley. The first three kills by Eagle troop were recorded in three shots by a single M1 over an interval of less than ten seconds.<sup>55</sup>

<sup>&</sup>lt;sup>55</sup> Stephen Biddle, *Victory Misunderstood: What the Gulf War Tells Us about the Future of Conflict*, (Boston, MA: The MIT Press, 1996), 161.

The years of laying the foundation for training at home station and refined at the training centers supplemented by and joint exercises overseas paid off and the results on the battlefield were impressive.

The Army struggled in what it needed in material acquisitions after the Vietnam War until the development of the AirLand Battle doctrine. Stewart mentions, the "AirLand Battle doctrine had additional utility because it helped to define both the proper equipment for its execution and the appropriate organization of military units for battle...the new AirLand Battle doctrine explicitly acknowledged the growth of technology both as a threat and as a requirement for new equipment to meet the threat." The Army had to continue to modernize its equipment to keep pace with technology and a growing need to have more capability with fewer pieces of equipment and personnel to operate it. The Soviets had more soldiers and equipment. That meant that the U.S. Army would need technological superior equipment to counter the many Soviet forces. To solve this problem of how to fight a larger enemy, Scales notes that "the Army had to have: a new tank, an infantry fighting vehicle, two helicopters – an attack helicopter and a utility transport...and an air defense missile."<sup>57</sup> This was known as the Army's "big five" and was pushed hard to move quickly past the bureaucracy of procurement. These systems as well as the improvement of others such as the M109 howitzer started to lay the foundation for a functional combined arms team. In the 1980s and into the 1990s the Army continued to improve, develop and acquire new capable systems. They purchased and fielded to the active Army Divisions the Multiple-Launch Rocket System (MLRS), the family of tactical wheeled vehicles and communications systems. The Army's equipment enabled the Corps and Divisions to have a superior combined arms team that could be synchronized in order to defeat a Soviet force.

The Army improved upon its leadership development and soldier education. The Vietnam War created doubt in most of what it did for training and education of its leaders and the impact that had on the

 $<sup>^{56}</sup>$  Stewart, *American Military History*, Volume II, *The United States Army in a Global Era, 1917-2008*,  $2^{nd}$  ed., 383.  $^{57}$  Scales, *Certain Victory: The US Army in the Gulf War*, 19.

outcome of the war. There were, as Stewart describes, "unsettling questions about the Army's role in Southeast Asia, about the soundness of its advice to the South Vietnamese, about its understanding of the nature of the war, about the appropriateness of its strategy and tactics, and about the adequacy of the counsel Army leaders provided to our nation's decision makers." The Vietnam War violated most of the cherished principles of war. The Army studied the leadership failures in all its schools from the Officer Basic Course to the War College as well as in the NCO schools. To address the missing expertise in operational planning, the link that was missing during the Vietnam War, LTG William Richardson created the School of Advanced Military Studies in 1981 for a select group of officers after the Command and General Staff College. Also, the NCO education system (NCOES) was improved and in 1972 the Sergeants Major Academy was created. This ensured well trained NCOs. Scales notes that, "As the NCOES produced better sergeants, the trust of officers in their NCOs returned in full measure and then began to grow. With trust came increased responsibility and in turn confidence." The officer and NCO team relationship had never been better. Leaders such as GEN Powell, who served in Vietnam, oversaw doctrine and training programs that ensured the Army did not make the same mistakes again.

In the Persian Gulf War, leadership played a vital role. Richard Swain observed that, "President Bush, Secretary of State Baker, and Secretary of Defense Cheney proved themselves masters of their trade, It is hard to think a war in which diplomatic and military actions have been better harmonized." Also, the training and development of the U.S. General Officer Corps played a significant role in the success of the war. The Generals such as GEN Colin Powell and GEN Norman Schwarzkopf worked well with the Secretary of Defense and the President. The civilian leadership trusted the advice of the military leadership. The leadership lessons learned from Vietnam ensured the Army had a clear strategy that

<sup>&</sup>lt;sup>58</sup> Stewart, *American Military History*, Volume II, *The United States Army in a Global Era, 1917-2008*, 2<sup>nd</sup> ed., 370. <sup>59</sup> Scales, *Certain Victory: The US Army in the Gulf War*, 25.

<sup>&</sup>lt;sup>60</sup> Richard M. Swain, *Lucky War, Third Army in Desert Storm* (Ft. Leavenworth, KS: Command and General Staff College Press, 1995), 326.

enabled overwhelming forces to defeat the Iraqis with great success. The civil military relations were the best the United States had seen since WWII.

In regards to personnel changes, the Army ended selective service and on 30 June 1973, the Army established an all-volunteer force. This was being considered while the Vietnam War was still in progress. The Department of Defense and Army had, as Stewart puts it, "begun tentative planning to transition to an all-volunteer force. This was new ground. Except for a short period of time immediately after World War II, the Army had not had a volunteer force since just before the U.S. entered World War II." This allowed those that did not want to be in the Army to get out and improved the quality of the force. In addition, the draft was not popular and a major reason for discontent with the American public towards the Army and war. Also, during the Vietnam War the Army had to accept substandard soldiers because of the draft. Of these new soldier recruits, 40 percent had no high school diplomas and 41 percent had low mental aptitude scores. These percentages changed with the all-volunteer force and by 1991, the high school graduation rate went up to 98 percent. This was because the Army invested in quality recruiters, financed recruiting bonuses and a college fund as well as increased soldier salaries. The Army did this under the "Be All You Can Be" slogan. The recruitment of a quality Army was a factor that ensured success in the Persian Gulf War.

The Army had to reduce its total strength during the interwar period. Stewart states, "In the interests of fiscal retrenchment, the Army projected budgets for the subsequent five years that would decrease the total size of the active service from approximately 780,000 in 1989 to approximately 535,000 soldiers in 1995."62 The Army had to change with the times and the budgetary constraints were always prevalent. The troop reduction needed to be done carefully to not negatively affect its capability to conduct both CAM and WAS. This reduction started just prior to the Persian Gulf War but itself was not necessarily an issue because it allowed the Army to be more selective. The Army could also focus on

Stewart, American Military History, Volume II, The United States Army in a Global Era, 1917-2008, 2<sup>nd</sup> ed., 374.
 Stewart, American Military History, Volume II, The United States Army in a Global Era, 1917-2008, 2<sup>nd</sup> ed., 407.

improving benefits to recruit and retain good soldiers. In addition, it allowed for continued improvements to facilities. This structural change improved moral in the Army as well. The total culture of the Army was continually changing for the better as well as how the U.S. public viewed its Army.

The result of the Persian Gulf War was that the U.S. Army, in conjunction with its coalition forces rapidly defeated the Iraqi Army. It comprised of a five-week air campaign and the 100 hour ground operation during January to February 1991. The U.S. Army had 148 battle deaths and our allies had 99 deaths. The Iraqis had approximately 20,000 deaths. It was an overwhelming victory. Scales states, "The 100 hour victory was all the more extraordinary because the American Army had seldom done remarkably well in opening battles of past wars." This statement refers to wars such as WWI and the others described in Charles Heller and William A. Sofft's *America's First Battles 1776-1965* that most officers read at the time.

There are many lessons learned from this timeframe. The preparations that the Army conducted in many areas just prior to the Persian Gulf War made success inevitable. The following statement by Bourque summarizes why the Army had such success. "In 1990 the U.S. Military was at the highest state of readiness and training in its history. Critical to the success of the post-Vietnam Army were changes in how it fought (AirLand Battle Doctrine) and trained (Performance Oriented Training) and a manpower procurement system that accepted only the most motivated and trainable young recruits." This success was at a low cost in American lives. This was another measurement for success. Swain also mentions, "The extraordinarily low casualty figures for attacking American ground forces were also the result of an advantage purchased by sustained investment in technology and training." The American public had never seen such a low casualty rate in a CAM operation. This level of success at a low casualty cost is now the expectation for future wars.

<sup>&</sup>lt;sup>63</sup> Scales, Certain Victory: The US Army in the Gulf War, 5.

<sup>&</sup>lt;sup>64</sup> Bourque, Jayhawk!: The VII Corps in the Persian Gulf War, V.

<sup>65</sup> Swain, Lucky War, Third Army in Desert Storm, 340.

Everything the Army invested in was used and contributed to defeating the Iraqis. John Romjue states that "The scores of observations and lessons from Desert Storm pointed to the significant synergistic effects of modern U.S. intelligence, communications, and weapon systems concertedly employed by a well-trained force to produce a higher battle tempo, deep and simultaneous attack capabilities, and the habit of command and control on the move." The Army controlled and executed a synchronized battle threw the depth and breadth of the battlefield ensuring devastating effects. It was a combined arms team that executed combat operations with skillful ease.

The well led and trained all-volunteer U.S. Army with exceptional equipment was unsurpassed. The Army had changed and Scales notes "The Army that went to Desert Storm represented the resurgence of an institution crippled both by the Vietnam War and the subsequent period of societal neglect. No victory so complete and unprecedented could have been achieved without an even more fundamental metamorphosis within the American military institutions." The U.S. has never seen its Army better prepared for war. The Army had recovered its balance from the Vietnam War and did what it was asked to do in the Persian Gulf War.

The Army's ability to deploy a sizable force in a relatively short amount of time was impressive. "Operations in Panama and the Persian Gulf had made a powerful case for anticipating expeditionary combat—the ability to project power around the world on short notice. American forces had rapidly deployed with very little warning to fight on distant and unexpected battlegrounds." The Army learned that it still needed a sizeable Army with expeditionary reach and logistical support. The level of forces was about right to conduct CAM and other possible WAS. The Persian Gulf War showed "that a different kind of Army is required for operational offensives... made of wheeled vehicles... also the large

<sup>&</sup>lt;sup>66</sup> John L. Romjue, *American Army Doctrine for the Post-Cold War* (Fort Monroe, VA: Military History Office, US TRADOC, 1996), 67.

<sup>&</sup>lt;sup>67</sup> Scales, Certain Victory: The US Army in the Gulf War, 383.

<sup>68</sup> Stewart, *American Military History*, Volume II, *The United States Army in a Global Era*, 1917-2008, 2<sup>nd</sup> ed., 427.

manpower-intensive army has not gone away." <sup>69</sup> The Army has to maintain a certain level of soldiers to be able to conduct both CAM and WAS.

The Persian Gulf War had many lessons. Scales notes, "To fight similar wars successfully in the future demands, more than ever, a trained army ready for combat on a moment's notice...an army can be effectively dismantled in months or allowed to atrophy through neglect in a few short years. Although easily lost, a trained and ready takes a great deal of time to rebuild." The U.S. Army must understand this and have an executable plan for the future. The Army must understanding what the future brings with global threats and having a plan to train and organize itself to prepare and defeat those threats. The Army prior to Desert Storm prepared itself for CAM. This while not forgetting what it tactically learned from Vietnam and still maintaining a force to conduct WAS. The Army did this with improvements in doctrine, organization and training while continually modernizing itself with technological improvements. Equally important were establishing the facilities to facilitate and improve training and the standard of living for the all-volunteer soldier. This led to a professional Army supported by the American public and ensured confidence in its ability to win in the Persian Gulf War.

### China as a peer competitor

The U.S. Army has defined a hybrid threat in ADP 3-0 as "the diverse and dynamic combination of regular forces, irregular forces, terrorist forces, criminal elements, or a combination of these forces and elements all unified to achieve mutually benefitting effects."<sup>71</sup> Threat is no longer a single force but multidimensional. Many countries have either all or some of these combinations such as China, Iran and North Korea. This paper will focus on China. As Michael Swaine, Andrew Yang and Even Medeiros state, "Many American and Chinese views as well as the past behavior of both parties could produce significant

<sup>69</sup> Swain, Lucky War, Third Army in Desert Storm, 343.
 <sup>70</sup> Scales, Certain Victory: The US Army in the Gulf War, 383.

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<sup>&</sup>lt;sup>71</sup> ADP 3-0 4

levels of instability, perhaps resulting in unwanted escalation and highly dangerous levels of military conflict." The project explores the challenges of a CAM operation against the People's Liberation Army (PLA) forces would pose for the U.S. Army.

Diplomatic and economic factors could easily spark a global conflict. Different situations such as what was stated by Secretary of Defense John McHugh and GEN George Casey, "the demand for resources such as water, energy and food will increase competition and the propensity for conflict."<sup>73</sup> Countries will do almost anything for the need to gain access or control over resources in order to build political or economic power. Conflicting diplomatic and economic policies could cause other nations to react. This could easily contribute to differences of opinion or misunderstanding that could lead to a military conflict. The world is neither safe or at peace and there are always potential threats. The greatest or worst case scenario would be with China who is becoming a viable military and economic near peer competitor.

China has already taken the first hostile step with offensive actions conducting cyber-attacks against the United States. GEN Casey mentions, "Additionally, there are an increasing number of foreign government-sponsored cyber programs, politically motivated individuals, non-state actors and criminals who are capable of initiating potentially debilitating attacks on the electronic infrastructure of our Nation."<sup>74</sup> China has shown this propensity to conduct cyber warfare and is conducting it today against civilian and governmental organizations in the U.S. and its allies. This could turn into a slow escalating attack from both sides that result in a kinetic attack to counter a cyber-attack. The U.S. would not tolerate the destruction of a critical financial or economic computer network. Either side could take the next step with escalation using conventional forces conducting a CAM.

<sup>&</sup>lt;sup>72</sup> Michael Swaine, Andrew Yang, and Evan Medeiros with Oriana Mastro, eds., Assessing the threat: the Chinese Military and Taiwan's Security (Baltimore, Maryland: Hopkins Fulfillment Service, 2007), 347.

<sup>&</sup>lt;sup>73</sup>John M. McHugh and George W. Casey Jr., "A Statement on the Posture of the United States Army 2011," 2 March 2011, 11. Document available at http://www.au.af.mil/au/awc/awcgate/army/armyposture2011.pdf (Accessed on August 2, 2011).

74 McHugh and Casey, "A Statement on the Posture of the United States Army 2011" 10.

China has a fast growing economy that is making it a global influencer. As stated by Anthony Cordsmen and Martin Klieber, "China's high rate of economic growth, the size of its gross domestic product (GDP), and its large population are making it a major force in the global economy." They have the fourth largest per capita GDP in the world with \$2.2 billion expected to increase in the years to come. Inflation has been relatively low. They have a steady growth in foreign investments and aggressively seek investment opportunities in other countries including those in Asia and South America even if they are known to be rogue states. They are developing their economic and manufacturing base to increase wealth but also to increase their military capabilities and capacity. China also continues to purchase arms from Russia and is the largest importer of arms in the world. They are purchasing arms and the technology or developing and building it themselves.

China's policies have been evolving and not only focused internally but also externally. The Chinese have stated by their State Council's National Defense Policy, "The international community is increasingly facing comprehensive, diverse and complex security threats. Politics, economic and security problems and geographical, ethnic and religious contradictions are interconnected and complex. Hegemonism and power politics remain a key factors undermining international security." The hegemonism statement is directed right at the U.S. and its tendency to use political and military power globally to influence favorable policies. China will counter this now that it has a growing economic power. China's motive and policies for growing its strategic military capabilities and modernizing its military forces are in order to protect its economic growth and its ability to acquire resources for that growth. According to China's stated policy mentioned by Cordsmen and Klieber, "it favors international peace and an equitable international order." This means they want peace if it suits them but they will use

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<sup>77</sup> Cordesman and Kleiber, *Chinese Military Modernization*, 1.

<sup>&</sup>lt;sup>75</sup> Anthony H. Cordesman and Martin Kleiber, *Chinese Military Modernization* (Washington, D.C.: The Center for Strategic and International Studies Press, 2007), 13.

<sup>&</sup>lt;sup>76</sup> Information Office of the State Council of the People's Republic of China, *China's National Defense in 2006*. (Beijing: State Council of the People's Republic of China, December 29, 2006). Document available at http://www.china.org.cn/english/features/book/194421.htm (Accessed on November 15, 2011).

force to ensure equitable outcomes that are advantageous to China. This could be in direct conflict with U.S. national interests and moral obligations to internationally law-abiding nations.

China has three major territorial disputes other than the most important one with Taiwan. They are the South China Sea and China's claims over influence of the shipping lanes. A second is with Japan and control over the East China Sea that has natural gas. Lastly, India with its several-disputed border sections with China. An example of this is the occupied area of Aksai Chin, which is part of India but administered by China after China's invasion in the Sino-Indian War of 1962. As the SECDEF's Annual Report to Congress on China 2010 mentions, these are "perceived threats to China's ability to access and transport foreign resources, or disruptions on the Korean Peninsula could lead to shifts in China's military development and deployment patterns likely with consequences for neighboring states." The U.S. has many allies in the pacific and anyone of these disputes could involve the U.S. The Chinese are expanding their influence and power that could create competition and a CAM type conflict.

Taiwan is China's most important diplomatic, military and economic concern and nothing less than reunification under China rule would be acceptable. China's Defense Policy states "the struggle to oppose and contain the separatist forces for 'Taiwan Independence' and their activities remains a hard one...thus still posing a grave threat to China's sovereignty and territorial integrity as well as peace and stability across the Taiwan Straits." This is a strong statement concerning Taiwan and that it is still part of China. Anything stated contrary to this will contribute to instability in the region. This is part of their "active defense" and any attack by China on Taiwan would be a legitimate action of defense. This allows China any and all options concerning Taiwan. Robert Sutter mentions, "The Chinese military continues to devote extraordinary efforts to purchase and develop weapons systems to attack Americans if they were to intervene in a Taiwan contingency – China is the only large power in the world preparing to shoot

<sup>&</sup>lt;sup>78</sup> Office of the Secretary of Defense, *Annual Report to Congress, Military and Security Developments Involving the People's Republic of China, 2010* (Washington, DC: Department of Defense, 2010), 16. Document available at http://www.defense.gov/pubs/pdfs/2010 CMPR Final.pdf

<sup>&</sup>lt;sup>79</sup> Information Office of the State Council of the People's Republic of China, *China's National Defense in 2006*.

Americans." <sup>80</sup> They also have stated that the U.S. supports one China but continues to sell arms to Taiwan. The Chinese will not tolerate any independence movement. The Chinese have also talked about defending against intrusion into their territorial waters, space and borders. All these create possible conditions for misunderstanding and potential conflict.

China's military budget is extensive and growing because of their economic success. The Chinese military has the second largest, after the U.S., military budget in the world that was close to \$165 billion in 2006. This is 1.91 percent of their GDP and has been consistent with their rising GDP of 10 to 15 percent. The statistics show that it has been rising for the last decade. Therefore, the Chinese military is increasing in capabilities and capacity. The military spending was split closely across three areas: equipment, human resources and operations. They are, according to Cordsmen and Klieber, "increasing salaries and allowances...investment in weaponry and equipment and infrastructure...training of military personnel...compensating for price rise...and expenses for international cooperation." All the critical areas that a modern army needs to create for a solid foundation for a motivated well-trained and equipped soldier and Army.

The PLA doctrine is becoming more global and not just for internal security. China's Defense Review states that the PLA "ensures that it is well prepared for military struggle, with winning local wars under conditions of informationization and enhancing national sovereignty, security, and interests." China is transforming its forces for the long term and according to the SECDEF's Report "is improving its capacity for force projection and anti-access/areal denial. Consistent with a near term focus on

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<sup>&</sup>lt;sup>80</sup> Robert G. Sutter, *China's Rise in Asia – Promises, Prospects and Implications for the United States, Asia-Pacific Center for Security Studies, Occasional Paper Series,* (Honolulu, HI: Department of Defense, Asia-Pacific Center for Security Studies, February 2005), 6.

<sup>81</sup> Cordesman and Kleiber, Chinese Military Modernization, 47.

<sup>82</sup> Information Office of the State Council of the People's Republic of China, China's National Defense in 2006.

preparing for Taiwan Strait contingencies."<sup>83</sup> The PLA understands that China is becoming global and that it needs to keep up with the ability to protect and influence China's economic interests abroad.

China's military organization and structure are as follows. The Central Military Commission (CMC) of the Communist Party of China exercises leadership over the Armed Forces. The National People's Congress elects the Chairman of the CMC and also exercises the right to declare war and holds national defense powers. The PLA is part of the armed forces. The PLA as stated in the Defense Review "aims at moving from regional defense to trans-regional mobility and improving its capabilities in airground integrated operations." The PLA has a general staff and it is comprised of the ground forces, Navy and Air Force and the Second Artillery Corps that has its nuclear and conventional missiles. The PLA has 18 Group Armies and 35 Infantry, Armor, Airborne, Amphibious, and Artillery Divisions. The PLA also has expeditionary capabilities with three Airborne Divisions, two Marine Brigades and seven Special Forces Groups. The PLA is a well-organized military force. This gives them the capability to control in order to affect other nations with massive amounts of forces not only in Taiwan but in the Asian theater as well.

The PLA has been putting emphases on training and learning from other countries' experiences in order to reform and improve their training system. Cordsmen and Klieber state, "The focus of training is being shifted from individuals and units to command posts, key technicians and higher levels of training such as joint and live-fire exercises." The military is focused on training in integrated joint operations. They realize that their leadership has minimal experience in joint operations and they are working to rectify this through what the SECDEF's Report mentions as "training and professional military education, cross training rotational assignments to different services, war simulations, military training coordination

<sup>&</sup>lt;sup>83</sup> Office of the Secretary of Defense, *Annual Report to Congress, Military and Security Developments Involving the People's Republic of China*, 2010 (Washington, DC: Department of Defense, 2010), 1.

<sup>84</sup> Information Office of the State Council of the People's Republic of China, *China's National Defense in 2006.* 

<sup>85</sup> Cordesman and Kleiber, *Chinese Military Modernization*, 44.

zones, and multi-regional exercises.<sup>3,86</sup> What they lack in actual war experience they are making up for in regional training exercises.

The Military Training and Examination Program (MTEP) that was started in 2001 guide Chinese military training. Its focus as stated in China's National Defense review is that the "unit's core missions, more realistic training, and improving the capabilities to operate in the high-tech combat environment." This is similar to the U.S. Army's old Army Training and Evaluation Program (ARTEP). This is to ensure standards across the Chinese PLA. It also states that China has also conducted combined exercises with Pakistan, Gabon, Singapore, Mongolia, and Russia. Their doctrine states that these are in order to increase their experience in combined operations as well as learn war-fighting skills from participating counties. In addition, lessons learned from these exercises are incorporated back into the training program for the rest of the force.

The Chinese forces are acquiring and improving upon their material and equipment. They do this through either internal manufacturing or external purchases. China is increasing its capabilities across the full spectrum of operations. Cordesmen and Kleiber mention, "China has made great efforts to introduce high-tech equipment into its armed forces in order to enable its armed forces to lead extensive joint services campaigns with IT capabilities." They are increasing military research and innovations. China is reforming their equipment procurement and is planning to increase development in long-term capabilities in weapons and equipment. One example of this is that they are acquiring accurate land attack cruise missiles, as well as, inter-continental, short and anti-ship missiles. China is modernizing their nuclear missile capabilities as well. They are increasing and modernizing their air force for deep strike in order to support their ground forces. They have 1,680 fighters, 620 bombers, 450 transport which 490 of those can immediately range Taiwan. China is also increasing its space-based capabilities with

<sup>&</sup>lt;sup>86</sup> Office of the Secretary of Defense, Annual Report to Congress, Military and Security Developments Involving the People's Republic of China, 2010. 5.

<sup>&</sup>lt;sup>87</sup> Information Office of the State Council of the People's Republic of China, *China's National Defense in 2006*.

<sup>&</sup>lt;sup>88</sup> Cordesman and Kleiber, *Chinese Military Modernization*, 27.

intelligence, surveillance and reconnaissance, ground positioning systems and communications. They launched a navigation satellite in April 2009. They are increasing their technological-equipped systems across the spectrum of capabilities.

China's military personnel numbers are very substantial as expected for a country of 1.4 billion people. China's PLA has 2.5 million personnel and out of that, the ground forces have 1.6 million. They also have a large internal security force that is used to control their own population for internal security. However, in an attack on China, portions of this force can be used for internal defense to free up conventional forces to focus on enemy conventional forces. Their militias have approximately 12 million and reserves that have 800,000. This is compared to countries like India that have 1.1 million soldiers, North Korea that have 950,000 soldiers, U.S. that have 593,000 soldiers and Russia that have 360,000 soldiers. <sup>89</sup> China has the military forces to defend its borders as well as threaten regional neighbors. The Chinese are improving their military facilities and standard of living. China's military is increasing salaries and pensions as well as improving medical services and benefits. In addition, they are spending money on improved living conditions for its soldiers. These are all improvements to increase morale that will create better enlistments for a more professional army.

With these improvements, the PLA becomes more confident and capable for a possible conflict. The Chinese present a near peer competitor that the U.S. could engage in CAM. Thomas Donnelly and Fredrick Kegan state that, "China is potentially the greatest likely threat although the probability of direct conflict with China in the near terms is very low. China is also potentially very large, but also complex and unclear." The possibility in a conflict of interest that leads to a disagreement could arise. Many possible scenarios might cause a conflict between allies of the U.S. against China. With that then the U.S. Army would get involved. Some possible scenarios could be that North Korea invades South Korea,

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<sup>&</sup>lt;sup>89</sup> Cordesman and Kleiber, *Chinese Military Modernization*, 39.

Thomas Donnelly and Frederick W. Kegan, *Ground Truth, The Future of US Land Power* (Washington, DC: The AEI Press, 2008), 23.

South Korea defends, U.S. declares war on North Korea, and then China declares war on South Korea and the U.S. This scenario has played out before during the Korean War. Another different scenario is if China has a territorial dispute with Japan. At which time China declares war on Japan, therefore the U.S. gets involved and the conflict moves from the sea to the land in either China or Japan. Yet a third possibility could be that China has a border dispute with India and the U.S. comes to the aid of India after having improved relations with India. All these would lead to a possible CAM with the PLA for the U.S. Army.

The PLA understands the role the U.S. military has in its region. As the SECDEF's Report on China states, "The possibility of a military conflict with Taiwan and the U.S. military intervention remain the PLA's most pressing long term military concern." A possible scenario and a valid concern for the U.S. is that China invades Taiwan. Also in the SECDEF's Report states that China would use force if there was a "formal declaration of Taiwan independence; undefined moves toward Taiwan independence; internal unrest in Taiwan; Taiwan's acquisition of nuclear weapons; indefinite delays in the resumption of cross-Strait dialogue on unification; foreign intervention in Taiwan's internal affairs; and, foreign troops stationed on Taiwan." An attack of this type would cause the U.S. to support Taiwan with ground forces to defend the island and then conduct a possible counter attack onto the mainland. Other countries could be drawn in and this could develop into and Asian war. China will not use force as long as it believes that reunification remains a possibility. If the Chinese attack, they would move quickly against Taiwan in order to delay U.S. involvement or ensure a quick victory or at least gain enough ground to have an advantageous stalemate for a political victory. China has several options in order to unify Taiwan under China rule. They can conduct, as the SECDEF's Report mentions, a "maritime quarantine or blockade;

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<sup>&</sup>lt;sup>91</sup> Office of the Secretary of Defense, *Annual Report to Congress, Military and Security Developments Involving the People's Republic of China*, 2010, 16.

<sup>&</sup>lt;sup>92</sup> Office of the Secretary of Defense, Annual Report to Congress, Military and Security Developments Involving the People's Republic of China, 2010, 50.

limited force or coercive options; air and missile campaign; or an amphibious invasion."<sup>93</sup> They could use a combination of all these as well. This could involve the U.S. Army in a CAM scenario with a formidable PLA force.

If China were to engage in war in Asia with one of our allies in the region then that would pull the U.S. into a conflict, it would be a quantity versus a quality fight. China has vastly superior numbers across the war fighting functions. They would mass the many different types of forces against the U.S. in a short period. The training and technical advantage many not be enough for the U.S. forces to prevail. China is also tipping the scale in their favor by continuing to improve its forces to become more technologically advanced. China continues to improve on its training and large-scale exercises. Chinese leaders are learning from these exercises and by engaging in training with other countries. The U.S. Army and other services continue to draw down forces and spend less money on organization, training and equipment. The Chinese would simply overwhelm U.S. forces in a short timeframe. China is a near peer competitor and eventually the notion that the U.S. has superior weapons will soon be equalized.

# U.S. Army after Wide Area Security in Iraq and Afghanistan

The U.S. Army has been conducting WAS for the last ten years. These operations on the Global War on Terrorism in Iraq and Afghanistan have affected the Army. Many senior leaders in the Army have commented on the Army's current situation. They understand that the Army must be prepared for the future and they references that we need to be ready for ULO, which means all aspects of warfare from WAS to CAM. One such leader is GEN Casey who states that the Army is in "an uncertain and increasingly complex strategic environment. Hybrid threats made up of conventional, irregular, criminal and terrorist capabilities will continue to test our forces. Therefore, we must continue to organize our

<sup>&</sup>lt;sup>93</sup> Office of the Secretary of Defense, Annual Report to Congress, Military and Security Developments Involving the People's Republic of China, 2010, 51.

formations, update our doctrine and prepare our forces for the full spectrum of operations." Again, this is referring to ULO that includes CAM. GEN Raymond Odierno states in his introduction email to the Army as the new Chief of Staff that "today is like no other time in our history... It is also a time of uncertainty and historic change. We face a multitude of security challenges, such as transnational and regional terrorism...We have the uncertainty of the Arab Spring, the proliferation of nuclear weapons, and challenges of rising powers. All of this is underpinned by fiscal constraint." Any proliferation of nuclear weapons could cause the U.S. to react with military force. The major rising power mentioned is China. The U.S. fiscal constraints challenge the U.S. Army's ability to influence these external forces of conflict. The only consensus to our current situation is that it is a time like no other.

In Iraq, the current mission is concluding. The number is drawing down as President Obama's administration pushes for zero soldiers in Iraq. There will still have to be some assistance forces but ultimately there will be a minimal presence in Iraq. Over time OIF has included as Nathan Freier states, "a major combat campaign, opposed stabilization, seize and secure operations, a counter-network campaign, foreign internal defense, and support to foreign unconventional forces." The full spectrum of operations executed in a span of eight years in one war. In Afghanistan, GEN Casey mentions that there was a surge of "an additional 30,000 soldiers to Afghanistan to defeat the al-Qaeda terrorist network and the Taliban insurgency. This surge enabled our soldiers and our Afghan partners to take back insurgent sanctuaries." This mission is still underway but it is seeing progress in the execution of WAS. The U.S. Army, after the success of the surge, is currently reducing the numbers of soldiers in Afghanistan and the current plan is to withdraw by 2014.

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<sup>94</sup> McHugh and Casey, "A Statement on the Posture of the United States Army 2011," 8.

<sup>&</sup>lt;sup>95</sup> Raymond T. Odierno, Email, "Initial Thoughts - Chief of Staff, U.S. Army," 7 September 2011. Document available at www.carlisle.army.mil/banner/article.cfm?id=2149 (Accessed on November 5, 2011).

<sup>&</sup>lt;sup>96</sup> Nathan Freier, *U.S. Ground Force Capabilities through 2020* (Washington, DC: Center for Strategic and International Studies, October 2011), 1.

<sup>&</sup>lt;sup>97</sup> McHugh and Casey, "A Statement on the Posture of the United States Army 2011," 9.

The U.S. Army has captured the lessons learned from Iraq and Afghanistan and applied it to its current doctrine: In regards to doctrine, GEN Dempsey stated:

The Army Capstone Concept...will articulate how the Army thinks about future armed conflict under these conditions of uncertainty, change, competitiveness, and decentralization. It provides a grounded projection to describe the broad range of capabilities the Army requires to overcome a combination of hybrid threats and adaptive adversaries in an increasingly competitive operating environment. It will describe how the Army conducts operations. 98

There is also the creation of FM 3-24, Counterinsurgency published in 2006. This new doctrine captures the operations in Iraq and Afghanistan. The doctrine as Stewart describes "returned the attention of the institutional and operational Army to those skills that had lain dormant for decades but were now needed to fight the continuing Global War on Terrorism in Iraq, Afghanistan, and other locations."99 All these doctrinal concepts are relevant and what is needed for the war-fighting functions to conduct ULO with CAM and WAS. At this point, the Army is conducting only minor changes to doctrine.

The organization of the Army has changed in the last 10 years. The Army's modulatory organization is now Brigade Combat Team (BCT) centric changing from a Division one. The purpose of modularity is as Stewart states "to meet the force requirements of units constantly rotating to Iraq and Afghanistan, in September 2003 the U.S. Army began converting from an organization centered on Divisions." The Division grew from 10,000 to 18,000 soldiers with Brigades totaling 3,900. Now each Division has four separate BCTs that are a mix of combat, combat support, and combat service support units that are all organic. This is in order to make each BCT capable of independent operations. Each BCT and separate Brigades could be plugged into any Division Headquarters for any given mission.

This new Army organization takes from Divisions many assets that were organic in a separate Brigade and now makes them separate Battalions organic to the BCTs. The BCT has been reduced from

<sup>98</sup> Dempsey, "Speech to AUSA, October 2009."

<sup>&</sup>lt;sup>99</sup> Stewart, American Military History, Volume II, The United States Army in a Global Era, 1917-2008, 2<sup>nd</sup> ed., 505. <sup>100</sup> Stewart, American Military History, Volume II, The United States Army in a Global Era, 1917-2008, 2<sup>nd</sup> ed., 514.

three maneuver Battalions to two. It now has an assigned Recon, Surveillance, and Target Acquisition Squadron, a Fires Battalion and Support Battalion. There are only two Engineer Companies in the BCT. The BCTs have limited air defense and chemical capabilities. This was designed for the Army to be more expeditionary in a WAS fight and as a result many of the non-maneuver Battalions have been doing an infantry mission. This new concept was developed prior to 9/11 but was implemented during Operation Enduring Freedom and Operation Iraqi Freedom. It has not been tested in a CAM operation or at the training centers in a CAM type scenario. Modularity leaves the Divisions with limited assets to fight and shape the deep fight in a CAM. There are functional brigades but limited numbers to support each of the 10 Divisions and three Corps. This affects the Division's capabilities to conduct extended operations with fires, sustainment, engineer and aviation. All necessary components needed for a high tempo CAM operation.

The Army's sustained operations throughout the world continue to put a strain on the Army's Force Generation (ARFORGEN) model and system. There are 229,940 soldiers in 80 countries deployed outside CONUS and around the world. In addition, the budgetary constraints will stress the modularity BCT. GEN Casey writes, "Additionally we remain aware of the difficult economic conditions at home. These conditions will drive our efforts to transform our generating force into an innovative and adaptive organization." This means that the Army will have to find ways of operating, training and conducting missions with less time, equipment and personnel. The current Division and modular BCT have less equipment and personnel than the legacy Infantry or Armor Brigades with Divisional units in support. Modular BCTs are now number 3,500 soldiers reduced from legacy BDEs of 5,000. The Army's answer to this is to utilize the reserves and National Guard. GEN Casey stated that we must "institutionalize the investment in our reserve component and obtain assured and predictable access to them, so that the Army

<sup>&</sup>lt;sup>101</sup> McHugh and Casey, "A Statement on the Posture of the United States Army 2011," 8.

can achieve the strategic flexibility and operational depth." This idea could be problematic because we cannot continue to use our reserve forces the way we have the last ten years, as regular forces, that deploy often. It is contrary to the concept and intent of the National Guard and Reserves.

Concerning training, General Dempsey mentions that, "the strategy builds on our Army's eight years of combat experience but documents the need to broaden leaders beyond their demonstrated competency in irregular operations toward proficiency in full spectrum operations." The Army is struggling with training its total force. According to Donnelly and Kegan, "the need for infantry in the current conflict has driven the search for combat soldiers, even further; however, artillery and armored units in Iraq today are trained and used primarily as infantry. Reports indicate that some artillery and tankers have never qualified their systems. Virtually no units in the Active Army or Marines have trained for high end conventional warfare in years." This is true and stated by many soldiers. Artillery, armor and engineer units are struggling to accomplish their core competencies. WAS does not train these units and modularity makes it difficult to synchronize all these assets for large operations in CAM under a Division Commander. BCT Infantry and Armor Commanders are overwhelmed and not experts in the other supporting Battalions. There is a ten-year training gap that has to be fixed. There are NCOs that have never crewed their combat vehicles and officers that have not lead them at a training center under CAM. The institutional level of training is now at the Lieutenant Colonel and Master Sergeant level. This will take years to rectify. The understanding of combat systems starts at the level of Private and works its way up. Soldiers need to learn all the jobs of the system during an intense high tempo-training environment before becoming the Section/Crew Chief. Not only does the Army say it will train in CAM but also WAS under the ULO training program. Again, GEN Casey writes, "We must adapt our

McHugh and Casey, "A Statement on the Posture of the United States Army 2011," 15.Dempsey, "Speech to AUSA," October 2009.

Donnelly and Kegan, Ground Truth, The Future of US Land Power, 30.

institutions to effectively generate trained and ready forces for Full Spectrum Operations."<sup>105</sup> This will just put an added burden for units to try to train for everything not just, what they are weak in. Therefore, the time and quality of training for CAM is greatly reduced.

The Mission Command Training Program (MCTP) at Ft Leavenworth conducted research and study that came up with what the atrophied skills are for Army units conducting CAM. (See Illustration 1)



These skills are critical operations that the Army has to master to conduct CAM. As seen in the exhibit, the ability of the BCTs and Divisions to rapidly C2 and synchronize all its shaping operations in a high-tempo operational environment. All the training centers to include MCTP, NTC and JRTC are starting to train for ULO. However, the rotations are not fast enough and will be diluted with WAS training that it

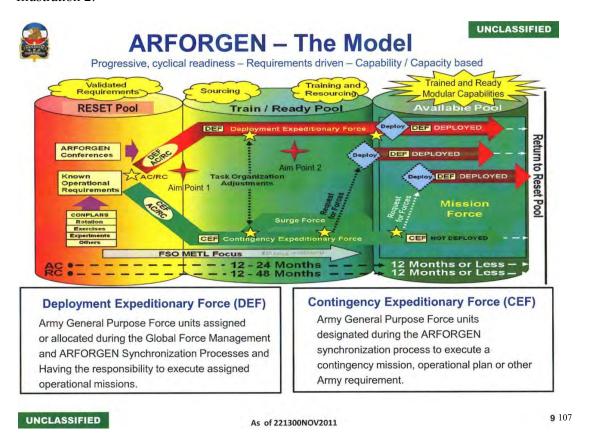
<sup>106</sup> Operations Group D, Mission Command Training Program, January 2011.

Illustration 1:

<sup>&</sup>lt;sup>105</sup> McHugh and Casey, "A Statement on the Posture of the United States Army 2011," 8.

will take years to be fully trained in CAM. The FORSCOM's ARFORGEN Model has laid out the amount of time that units will train in between possible deployments. (See Illustration 2)

#### Illustration 2:



The Army Headquarters has laid out the approved FSO Mission Essential Task List (METL) based off the direction from FM 7-0 to standardize these tasks for Brigades and higher. For a Division, it is four Mission Essential Tasks (MET) and 41 supporting tasks. In a HBCT, it is seven (MET) and 67 supporting tasks. The Fires Brigade has five METs and 53 supporting tasks. This is just two Brigades that may be in a Division formation for ULOs. There are just too many FSO tasks to train on to achieve proficiency over an approximate 18-month period. In addition, the Army leadership has forgotten how to do collective training since WAS training has been focused on at only the Squad level. This will take time just to train the trainers and develop some experience. Kristen Molinaro in her article mentions that GEN

<sup>107</sup> G3, United States Army Forces Command, November 2011.

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Cone stated that, "commanders have forgotten their role to manage training and build calendars that make sense." Another distractor to training under the budget cuts is that units are already experiencing an increase in red cycle taskings, such as gate guard and grass cutting for the BCTs during their training cycle. These red cycle tasks have not been seen since the pre 9/11 timeframe. Again, this is another distractor to the training timeline to become proficient in all FSO tasks. This will continue to leave CAM tasks untrained.

The Army states it will continue to modernize their equipment and material. Casey notes, "The Army will develop and field versatile, affordable, survivable and networked equipment to ensure our soldiers maintain a decisive advantage over any enemy they confront." This will be a challenge after the nation has been at war for ten years and with the increase in the nation's debt and the reduction of the national defense budget. Also, the equipment being modernized does not include one combat vehicle that will be the primary executer of a CAM operations. Therefore, the Army will execute CAM with older equipment.

Leadership and education in the U.S. Army today is solid except for one aspect. The senior Generals of the Army do not realize the severity of the atrophied skills of many of the branches such as armor, field artillery, aviation, engineer and logistics to conduct a synchronized CAM due to ten years of stability operations and the current organization under a Brigade centric construct. This is no fault of theirs, but they grew up as tactical leaders under the influence of the AirLand battle doctrine and experienced high level of training proficiency over many years in CAM. Many battle drills and synchronization tasks were easily executed and considered basic. These are now untrained. The Army still has its core Officer and Non Commissioned Officer training programs such as Non Commissioned Officer Basic Course, Basic Officer Leadership Course, Non Commissioned Officer Advanced Course,

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<sup>&</sup>lt;sup>108</sup> Kristen Molinaro, "Gen. Cone lays out TRADOC strategies at annual Maneuver Conference," 13 September 2011. Article available at http://www.army.mil/article/65454/Gen\_Cone\_lays\_out\_TRADOC\_strategies\_at\_annual\_Maneuver\_Conference (Accessed on December 15, 2011).

<sup>&</sup>lt;sup>109</sup> McHugh and Casey, "A Statement on the Posture of the United States Army 2011," 15.

Captains Career Course, Intermediate Level Education, Sergeant Majors Academy and the War College. These Army courses have change only slightly in content to build on the Army's ten years of combat experience in WAS but will need to broaden leaders beyond their experience towards proficiency in ULO and especially CAM. In a matter of a short time, these institutions could start training on CAM. With this one exception, there have been no major shifts in the overall educational system and there is no need to change based off the quality of the Non Commissioned Officer and Officer Corps in the U.S. Army today.

Many advocate increasing the total strength of the Army in order to increase its capacity and capabilities. This would increase the cost and for an army of about eight hundred thousand it would be about \$240 billion. This would be a solution for the increase in operational tempo and decrease in capabilities. However, considering the current budget constraints and that the Army has already made a decision to reduce its numbers, this is not even an option to ensure CAM at this point.

The future of the Army as stated by the Center for Strategic and International Studies in a report on U.S. Ground Force Capabilities through 2020 found that in a comprehensive review of threats and U.S. ground forces, reached the following conclusion. Fr

eier mentions that, "The ground forces remain relevant, useful and increasingly unique and will likely remain in greater demand over the next 10 years...the capabilities associated with strategic and operational responsiveness, forcible entry and armored maneuver will be broadly useful to and important in the future strategic environment." The Army must maintain its ability to conduct CAM operations in the future.

<sup>&</sup>lt;sup>110</sup> Freier, U.S. Ground Force Capabilities through 2020, Vi.

# Conclusion and Recommendations for the U.S. Army on Combined Arms Maneuver

The U.S. Army is not ready for the next CAM operation. This monograph paper uses the U.S. Army's lessons learned from two historical examples to help understand the Army's current situation. It relates them to the current analysis of the Army's strengths and shortcomings of a possible future CAM utilizing a possible confrontation with China.

The U.S. Army addresses CAM in doctrine, leadership, and facilities. This paper saw no major deficiencies. The Army's capstone doctrine specifically ADP 3-0 is solid and covers all aspects of the spectrum of ULO. The Army recruits, retains and trains the best and brightest leaders and eliminates those from the ranks that do not make the standard. This has been apparent the last ten years of WAS. Even with the Nation at war, the Army has had no problems with recruitment and retention of officers. The Army has many benefits that retain both officers and soldiers to include equivalent civilian pay, exceptional retirement plan, good medical care and excellent educational benefits. The Army's training facilities are adequate to train on ULO. All the Army posts have local training areas, ranges and impact areas to train up to at least Company/Battery level, if not at Battalion level. In addition, the facilities at the maneuver training centers are excellent. Lastly, the Army has been emphasizing and improving family facilities and programs. But the Army is not currently ready for CAM in regards to training and organization with some minor issues in material and personnel. The Army will need leader emphases to ensure time and resources to develop cohesive organizations under modularity, conduct focused CAM training, improve upon its equipment and ensure the right numbers of quality personnel to execute CAM as well as WAS.

China is a viable threat. If diplomacy does not contain or collaborates with China then there could be conflict. This could start over economic tensions or old alliances such as the one with Taiwan. Freier

states "Defense experts inside and outside of government increasingly express the need for a shift in U.S. defense posture focused more heavily against China's rising assertiveness in East Asia." It would take a large technological U.S. force that is well trained and equipped to engage and defeat China. Also, not mentioned in detail in this research but similar to China is Iran and North Korea, which could also be possible threats for CAM. The U.S Army cannot afford to ignore these threats and is not in the country's vital interest to do so.

The Army is lacking in armor and field artillery assets with only five current pure heavy

Divisions. Our allies such as the United Kingdom, Australia and Canada as well as other NATO members are drawing down their heavy capabilities as well. We are not the well trained and capable Army that decisively executed CAM which defeated the Iraqis in the Persian Gulf War, nor the one that defeated Iraq in OIF I due to years of WAS operations in Iraq and Afghanistan. The Army, as laid out in its mission, must win the nation's wars. Donnelly and Kegan mention, "The ground forces must be able to retain their core competencies as well as support ongoing struggles." The Army cannot rapidly train and equip for every task under ULO so the Army will have to accept risk in certain aspects of ULO. Donnelly and Kegan mention, "The requirement to protect against all possible threats would bankrupt almost any state." The hardest to train for is CAM. In addition, the Army must decide whether it is going to spend money on training in our current combat systems or technological advancements that only improve WAS capabilities. Biddle adds that, "Thus one should be wary of proposals to protect modernization funding at the expense of training and readiness accounts. The decay of today's combat skills would not only forfeit the ability to exploit current technical advantages against less-skilled

Freier, U.S. Ground Force Capabilities through 2020, Vi.

Donnelly and Kegan, Ground Truth, The Future of US Land Power, 30.

<sup>&</sup>lt;sup>113</sup> Donnelly and Kegan, Ground Truth, The Future of US Land Power, 14.

opponents, but it would also enable future challengers to turn the tables." This is the current critical challenge of the U.S. Army.

Taking into account the major lessons learned from WWI, the Army must able to utilize and synchronize all its war-fighting functions when it conducts operations. If the Army does not then it will take catastrophic amounts of unnecessary casualties and operational setbacks. In the current time of instant access to the media and reporting, these amounts of losses would be unacceptable to the public and political leadership. The lessons from the Persian Gulf War are that when the Army is prepared it takes minimal casualties and equipment damage as well as wins decisively ensuring continued public support. The nation now prefers quick and painless wars. Since the Army is still fighting in Afghanistan and just finishing operations in Iraq, it does not have any significant operational and strategic reserves. Also, the operations tempo of the force currently serving would not support a drawn out CAM. Based on the project research and findings the Army is not currently ready for CAM. Gentile states concerning CAM that, "It would be hard to do such an operation without the intellectual framework of an Armored Force that the American Army used to have, but of late has gone away...Competent field armies, skilled in all-arms warfare, are not made overnight." The Army cannot afford to fail at the next CAM. This would have detrimental consequences for future national security policies towards the Army. The Army would be reduced in its capabilities and marginalized in its efforts. This is because the public and political sectors would not support a large defense budget if it does not produce results. In addition, our economic and military prestige and standing in the world would be uncontrollable and therefore diminished. Other nation's policies towards the U.S. would become increasingly difficult to manage and control. This is a critical concern for the Army and its leadership.

Some possible solutions are as follows. Modularity should be looked at not only at the Brigade level but also at the Division level. Looking at what worked for the Legacy Division and incorporating it

Biddle, Victory Misunderstood: What the Gulf War Tells Us about the Future of Conflict, 177.
 Gentile, "The Death of the Armor Corps."

with some aspects that were done at the BCT level. The support Brigades such as the field artillery, engineer, aviation, military intelligence and logistics Brigades should be organic to the Division especially under reductions. Some of this has been addressed with training oversight relationships but more needs to be done. This would give the Division Commander some assets to shape the COE and the ability to support their brigades. Let the Division with the leadership of a Major General determine what is needed to support the BCTs for what mission is assigned. This would also alleviate the huge burden off an infantry or armor Colonel from having to train, not only infantry and armor units, but all the other supporting units as well. A supporting Colonel could easily lead, train and maintain subordinate units in his own branch. The BCTs are too large for any Colonel to manage each branch. In addition, every heavy BCT in the Army should initially train solely on CAM METL tasks and conduct a CAM exercise at a training center. Every Division and Corps should conduct CAM training with a CAM Warfighter Exercise run and observed by the Mission Command Training Program. This should be done at least twice before all of these units train and conduct a Full Spectrum Exercise. This is especially true for the heavy BCTs and Divisions. This would take about four years with the expected number of heavy BCTs after the drawdown. The light forces could easily conduct one CAM exercise then transition to a Full Spectrum Exercise. There is a smaller parameter of Full Spectrum Operations METL extremes for light forces between WAS and CAM. They also have more of the propensity to conduct WAS then heavier forces. There is enough expertise in the Army on WAS that it will not become a training issue for some time and much has been captured in doctrine. Also, aspects of WAS will be prevalent in a CAM type exercise that will be enough to sustain proficiency. These are recommendations to the U.S. Army's leadership in order to assist in the Army's ability to be prepared to fight and win our nations next CAM operation that could easily happen in today's current global environment.

# **Bibliography**

#### **Primary Sources**

- Chairman of the Joint Chiefs of Staff. *CJCSM 3170.01A*. Washington, DC: Government Printing Office, 12 March 2004.
- Headquarters Department of the Army. *Army Doctrine Publication 3-0, Unified Land Operations.* Washington, DC: Government Printing Office, 10 October 2011.
- Information Office of the State Council of the People's Republic of China. *China's National Defense in 2006.* Beijing: State Council of the People's Republic of China, 29 December 2006.
- McHugh, John and Casey, George W. *A Statement on the Posture of the United States Army 2011*. submitted by The Honorable John M. McHugh and General George W. Casey, Jr. to the Committees and Subcommittees of the United States Senate and the House of Representatives 1st Session, 112th Congress, March 2011. Document available at http://www.au.af.mil/au/awc/awcgate/army/ armyposture2011.pdf
- Office of the Secretary of Defense, Annual Report to Congress, *Military and Security Developments Involving the People's Republic of China, 2010.* Washington, DC: Department of Defense, 2010.

## Secondary Sources

- Biddle, Stephen. *Victory Misunderstood: What the Gulf War Tells Us about the Future of Conflict.* Boston, MA: The MIT Press, 1996.
- Birtle, Andrew J. *U.S Army Counterinsurgency and Contingency Operations Doctrine 1860-1941*. Washington, DC: US Government Printing Office, 1998.
- Bourque, Stephen A. *Jayhawk!*: The VII Corps in the Persian Gulf War. Washington, DC: Government Printing Office, 2002.
- Coffman, Edward M. *The Regulars: The American Army 1898-1941*. Cambridge, Massachusetts and London, England: The Belknap Press of Harvard University Press, 2004.
- Coffman, Edward M. *The War to End All Wars*. Lexington, Kentucky: The University Press of Kentucky, 1986.
- Cordesman, Anthony H. and Martin Kleiber. *Chinese Military Modernization*. Washington, D.C.: The Center for Strategic and International Studies Press, 2007.
- Crane, Conrad C. Avoiding Vietnam: The U.S. Army's Response To Defeat In Southeast Asia. Carlisle, PA: Strategic Studies Institute, U.S. Army War College, 2002.
- Donnelly, Thomas and Frederick W. Kegan. *Ground Truth, The Future of US Land Power*. Washington, DC: The AEI Press, 2008.
- Fleischer, Samuel E. ed. *Measuring China's Military Might*. New York, New York: Nova Science Publishers, Inc., 2010.

- Graff, David A. and Robin Higham. *A Military History of China*. Boulder, Colorado: Westview Press, 2002.
- Grotelueschen Mark Ethan. *The AEF Way of War: The American Army and Combat in World War I.* New York, New York: Cambridge University Press, 2007.
- Heller, Charles E. and William A. Sofft, eds. *America's First Battles 1776-1965*. Lawrence, Kansas: University Press of Kansas, 1986.
- House, Jonathan M. *Toward Combined Arms Warfare: A Survey of 20<sup>th</sup> Century Tactics, Docrtine, and Organization*. Washington, DC: Government Printing Office, August 1984.
- Isaacs, Arnold R. Vietnam Shadows: *The War, Its Ghosts, and its Legacy*. Baltimore, Maryland: The John Hopkins University Press, 1997.
- Matheny, Michael R. *Carrying the War to the Enemy: American Operational Art to 1945*. Norman, OK: University of Oklahoma Press, 2011.
- McGrath, John J. Crossing the Line of Departure: Battle Command on the Move; A Historical Perspective. Fort Leavenworth, Kansas: Combat Institute Press, February 2006.
- Mosier, John. Myth of the Great War. New York, New York: HarperCollins Publishers, 2001.
- Ong, Russell. China's Security Interests in the 21st Century. New York, New York: Routledge, 2007.
- Pearlmen, Michael D. *Warmaking and the American Democracy*. Lawrence, Kansas: University Press of Kansas, 1999.
- Romjue, John L. From Active Defense to AirLand Battle: The Development of the Army Doctrine 1973-1982. Washington, DC: Government Printing Office, September 1984.
- Romjue, John L. *American Army Doctrine for the Post-Cold War*. Fort Monroe, VA: Military History Office, US TRADOC, 1996.
- Scales, Robert H. *Certain Victory: The US Army in the Gulf War*. Fort Leavenworth, KS: A Select Reprint U.S. Army Command and General Staff College Press, 1994.
- Schifferle, Peter J. Americas School for War: Fort Leavenworth, Officer Education, and Victory in World War II. Lawrence, Kansas: University Press of Kansas, 2010.
- Scobell, Andrew and Larry M. Wortzel, ed. *China's Growing Military Power: Perspectives on Security, Ballistic Missiles, and Conventional Capabilities*. Carlisle, Pennsylvania: Strategic Studies Institute, September 2002.
- Shambaugh, David L. *Modernizing China's Military: Progress, Problems and Prospects*. Berkeley and Los Angeles, California: University of California Press, 2002.
- Stewart, Richard W. ed. *American Military History*, Volume I, *The United States Army and the Forging of a Nation*, 1775-1917, Second Edition. Washington, DC: United States Center for Military History, United States Army, 2009.

- Stewart, Richard W. ed. *American Military History*, Volume II, *The United States Army in a Global Era.* 1917-2008, Second Edition. Washington, DC: United States Center for Military History, United States Army, 2010.
- Stienburg, John W. and Bruce W. Manning, and David Schimmelpenninck van der Oye, and Yokote Shinji and David Wolf, eds. *The Russo-Japanese War in Global Perspective World War Zero*. The Netherlands: Koninklijke Brill NV, 2005.
- Swain, Richard M. *Lucky War: Third Army in Desert Storm*. Ft. Leavenworth, KS: Command and General Staff College Press, 1995.
- Swaine, Michael, Andrew Yang, and Evan Medeiros with Oriana Mastro ed. *Assessing the threat: the Chinese Military and Taiwan's Security*. Baltimore, Maryland: Hopkins Fulfillment Service, 2007.
- Vetock, Dennis J. Lessons Learned: A History of the US Army Lesson Learning. Carlisle Barracks, PA: US Army Military History Institute, 1988.
- War Department. Annual Reports, 1919, Volume I. Washington, DC: Government Printing Office, 1920.
- Weigley, Russell F. *History of the United States Army*. New York, NY: Macmillan Publishing Co., Inc., 1967.
- Wright, Donald P. A Different Kind of War: The United States Army in Operation ENDURING FREEDOM October 2001-September 2005. Fort Leavenworth, Kansas: Combat Institute Press, May 2010.

### Journals/Articles/Papers

- Fullerton, Dan C. "Learning from the Past: Assessing World War I, Excerpted from Bright Prospects, Bleak Realities: the U.S. Army's Interwar Modernization Program for the coming of the Second World War". PhD. Dissertation, University of Kansas, 2006.
- Freier, Nathan. "U.S. Ground Force Capabilities through 2020". Center for Strategic & International Studies, October 2011.
- Gentile, Gain P. "Beneficial War". Article available at hir.harvard.edu/india-in-transition/beneficial-war-0, 24 December 2011.
- Gentile, Gian P. "COIN is Dead: U.S. Army Must Put Strategy Over Tactics". Article available at www.worldpoliticsreview.com/articles/print/10731, 22 November 2011.
- Gentile, Gian P. "The Death of the Armor Corps". Article available at www.smallwars.com, 2010.
- Gentile, Gian P. "A Strategy of Tactics: Population-Centric COIN and the Army". Carlisle, PA: U.S. Army War College Quarterly, Parameters, Winter 2011-12.
- Sutter, Robert G. "China's Rise in Asia Promises, Prospects and Implications for the United States," *Asia-Pacific Center for Security Studies, Occasional Paper Series*. Honolulu, HI: Department of Defense, Asia-Pacific Center for Security Studies, February 2005.

# Speeches/Emails

- Dempsey, Martin. Commanding General of the U.S. Army Training and Doctrine Command, "Keynote speech for the Association of the United States Army Chapter Presidents Dinner". Washington, DC, October 6, 2009. Speech available at http://www.army.mil/article/28312/gen-martin-dempsey-delivers-keynote-during-the-ausa-chapter-presidents-dinner/
- Gates, Robert M. "A speech delivered by the Secretary of Defense to United States Military Academy". West Point, NY, February 25, 2011. Speech available at http://www.defense.gov/speeches/speech.aspx?speechid=1539
- Gates, Robert M. "A speech delivered by the Secretary of Defense to Association of the United States Army". Washington, DC, October 10, 2007. Speech available at http://www.defense.gov/Speeches/Speech.aspx?SpeechID=1181
- Molinaro, Kristen. "Gen. Cone lays out TRADOC strategies at annual Maneuver Conference".13 September 2011. Article available at http://www.army.mil/article/65454/ Gen Cone lays out TRADOC strategies at annual Maneuver Conference
- Odierno, Raymond T. Email, "Initial Thoughts Chief of Staff, U.S. Army". 7 September 2011. Document available at www.carlisle.army.mil/banner/article.cfm?id=2149

## Websites

U.S. Army FSO METL at Army Training Network at https://atn.army.mil/fso/default.aspx

WWI statistics at http://www.pbs.org/greatwar/resources/casdeath\_pop.html

Yom Kippur War at http://www.historylearningsite.co.uk/yom kippur war of 1973.htm